

## Safety Data Sheet

Copyright,2022, 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:	33-2646-9	Version number:	3.01	
Revision date:	03/10/2022	Supersedes date:	17/09/2019	
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(TM) Scotch-Weld(TM) Low Odor Acrylic Adhesive DP8825NS Green

**Product Identification Numbers** 62-2866-1445-8 62-2866-3630-3

7100068120 7100067297

#### 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 3555E 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:

33-2643-6, 33-2640-2

## **TRANSPORTATION INFORMATION**

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

## **KIT LABEL**

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

## **CLASSIFICATION:**

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319
Skin Sensitization, Category 1 - Skin Sens. 1; H317
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 GHS07 (Exclamation mark) |GHS08 (Health Hazard) |GHS09 (Environment) |

#### Pictograms



Contains: Tert-butyl 3,5,5-trimethylperoxyhexanoate; Tetrahydrofurfuryl methacrylate; 2-hydroxyethyl methacrylate

## HAZARD STATEMENTS:

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H360D	May damage the unborn child.
H411	Toxic to aquatic life with long lasting effects.

## PRECAUTIONARY STATEMENTS

<b>Prevention:</b> P201 P273 P280E	Obtain special instructions before use. Avoid release to the environment. Wear protective gloves.
<b>Response:</b> P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if
P308 + P313 P333 + P313	present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention.

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

## <=125 ml Hazard statements H317 N H360D N

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

## <=125 ml Precautionary statements

Prevention:	
P201	Obtain special instructions before use.
P280E	Wear protective gloves.

## **Response:**

P308 + P313	IF exposed or concerned: Get	medical advice/attention.
P333 + P313	If skin irritation or rash occurs:	Get medical advice/attention.

## SUPPLEMENTAL INFORMATION:

## **Supplemental Precautionary Statements:**

Restricted to professional users.

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

## **Revision information:**

Kit: Component document group number(s) information was modified.
Section 1: Emergency telephone information was modified.
Section 2: <125ml Precautionary - Response information was modified.</li>
Label: CLP Classification information was modified.
Label: CLP Precautionary - Disposal information was deleted.
Label: CLP Precautionary - Prevention information was modified.
Label: CLP Precautionary - Response information was modified.
Label: CLP Precautionary - Response information was modified.
Label: CLP Precautionary - Response information was modified.
Label: CLP Supplemental Precautionary Statements information was deleted.
Section 02: SDS Elements: CLP Supplemental Precautionary Statements information was added.



## 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:	33-2640-2	Version number:	5.00
<b>Revision date:</b>	23/09/2024	Supersedes date:	27/02/2023

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<sup>™</sup> Scotch-Weld<sup>™</sup> Low Odor Acrylic Adhesive DP8825NS Green, Part A

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

## Identified uses

Structural adhesive.

## 1.3. Details of the supplier of the safety data sheet

Address:	3M 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:**

Skin Sensitization, Category 1 - Skin Sens. 1; H317 Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

## 2.2. Label elements CLP REGULATION (EC) No 1272/2008

**SIGNAL WORD** WARNING.

Symbols GHS07 (Exclamation mark) |

## Pictograms



Ingredients: Ingredient		CAS Nbr	EC No.	% by Wt
Tert-butyl 3,5,5-trimethylperoxyhexanoate		13122-18-4	236-050-7	1 - 10
HAZARD STATEMENTS: H317				
H412	Harmful to aqu	atic life with long lasting effect	S.	
PRECAUTIONARY STATEM	ENTS			
<b>Prevention:</b> P280E	Wear protectiv	ve gloves.		
<b>Response:</b> P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.			
For containers not exceeding 12	5 ml the followin	g Hazard and Precautionary s	tatements may be used:	
< <b>=125 ml Hazard statements</b> H317	May cause an allergic skin reaction.			
H412	Harmful to aquatic life with long lasting effects.			
<=125 ml Precautionary statem	ents			
<b>Prevention:</b> P280E	Wear protecti	ve gloves.		
<b>Response:</b> P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.			
11% of the mixture consists of con	mponents of unkn	own acute oral toxicity.		
Contains 44% of components with	h unknown hazard	ls to the aquatic environment.		
Notes on labelling				
The organic peroxide classification from CAS# 13122-18-4 does not apply to the material. The calculated available oxygen				vailable oxygen

The organic peroxide classification from CAS# 13122-18-4 does not apply to the material. The calculated available oxygen content is less than 1%.

## 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]
Oxydipropyl dibenzoate	(CAS-No.) 27138-31-4 (EC-No.) 248-258-5 (REACH-No.) 01- 2119529241-49	45 - 80	Aquatic Chronic 3, H412
Styrene, polymer with 1,3-Butadiene, butylacrylate and methyl methacrylate	(CAS-No.) 25101-28-4	5 - 30	Substance not classified as hazardous
Catalyst.	Trade Secret	1 - 20	Substance not classified as hazardous
Tert-butyl 3,5,5- trimethylperoxyhexanoate	(CAS-No.) 13122-18-4 (EC-No.) 236-050-7	1 - 10	Org. Perox. CD, H242 Skin Sens. 1B, H317 Aquatic Acute 1, H400,M=1 Aquatic Chronic 3, H412

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

The most important symptoms and effects based on the CLP classification include: Allergic skin reaction (redness, swelling, blistering, and itching).

**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> Hydrocarbons. Carbon monoxide Carbon dioxide. <u>Condition</u> During combustion. During combustion. During combustion.

## 5.3. Advice for fire-fighters

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

## **SECTION 6: Accidental release measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

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

## 6.2. Environmental precautions

Avoid release to the environment.

## 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 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 away from heat. Store away from acids. Store away from strong bases. Store away from oxidising agents. Store away from amines.

## 7.3. Specific end use(s)

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

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

## 8.1 Control parameters

## **Occupational exposure limits**

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

## **Biological limit values**

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

## 8.2. Exposure controls

## 8.2.1. Engineering controls

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

## 8.2.2. Personal protective equipment (PPE)

## Eye/face protection

None required.

## Skin/hand protection

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. When only incidental contact is anticipated, alternative glove material(s) may be used. If contact with the glove does occur, remove immediately and replace with a set of new gloves. For incidental contact, gloves made of nitrile rubber are recommended. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended:

MaterialThickness (mm)Polymer laminateNo data available

**Breakthrough Time** No data available

Applicable Norms/Standards Use gloves tested to EN 374

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

## **Respiratory protection**

None required.

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

## 9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Paste
Colour	Blue
Odor	Mild Hydrocarbon
Odour threshold	No data available.
Melting point/freezing point	Not applicable.
Boiling point/boiling range	> 93.3 °C
Flammability	Not applicable.

Flammable Limits(LEL)	No data available.	
Flammable Limits(UEL)	No data available.	
Flash point	> 93.3 °C [ <i>Test Method</i> :Closed Cup]	
Autoignition temperature	No data available.	
Decomposition temperature	No data available.	
рН	substance/mixture is non-soluble (in water)	
Kinematic Viscosity	18,519 mm <sup>2</sup> /sec	
Water solubility	Nil	
Solubility- non-water	No data available.	
Partition coefficient: n-octanol/water	No data available.	
Vapour pressure	No data available.	
Density	1.08 g/ml	
Relative density	1.08 [ <i>Ref Std</i> :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 Compounds	No data available.
Evaporation rate	No data available.
Molecular weight	Not applicable.
Percent volatile	No data available.

## **SECTION 10: Stability and reactivity**

## **10.1 Reactivity**

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

## **10.2** Chemical stability

Stable.

## **10.3 Possibility of hazardous reactions**

Hazardous polymerisation will not occur.

## 10.4 Conditions to avoid

Heat. Sparks and/or flames.

## **10.5 Incompatible materials**

Amines. Strong acids. Strong bases. Strong oxidising agents.

## 10.6 Hazardous decomposition products <u>Substance</u>

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 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

This product may have a characteristic odour; however, no adverse health effects are anticipated.

## 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.

## Eye contact

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

## Ingestion

May be harmful if swallowed.

## Toxicological Data

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

## Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
Oxydipropyl dibenzoate	Dermal	Rat	LD50 > 2,000 mg/kg
Oxydipropyl dibenzoate	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 200 mg/l
Oxydipropyl dibenzoate	Ingestion	Rat	LD50 3,295 mg/kg
Styrene, polymer with 1,3-Butadiene, butylacrylate and methyl methacrylate	Dermal		LD50 estimated to be > 5,000 mg/kg
Styrene, polymer with 1,3-Butadiene, butylacrylate and methyl methacrylate	Ingestion	Rat	LD50 > 5,000 mg/kg
Catalyst.	Dermal	Professio nal judgeme nt	LD50 estimated to be 2,000 - 5,000 mg/kg
Catalyst.	Ingestion	Rat	LD50 > 2,000 mg/kg
Tert-butyl 3,5,5-trimethylperoxyhexanoate	Dermal	Rat	LD50 > 2,000 mg/kg
Tert-butyl 3,5,5-trimethylperoxyhexanoate	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 0.8 mg/l
Tert-butyl 3,5,5-trimethylperoxyhexanoate	Ingestion	Rat	LD50 12,905 mg/kg

ATE = acute toxicity estimate

## **Skin Corrosion/Irritation**

	Name	Species	Value
--	------	---------	-------

Oxydipropyl dibenzoate	Rabbit	No significant irritation
Tert-butyl 3,5,5-trimethylperoxyhexanoate	Rabbit	No significant irritation

## Serious Eye Damage/Irritation

Name	Species	Value
Oxydipropyl dibenzoate	Rabbit	No significant irritation
Tert-butyl 3,5,5-trimethylperoxyhexanoate	Rabbit	No significant irritation

#### **Skin Sensitisation**

Name	Species	Value
Oxydipropyl dibenzoate	Guinea	Not classified
	pig	
Catalyst.	Mouse	Not classified
Tert-butyl 3,5,5-trimethylperoxyhexanoate	Guinea	Sensitising
	pig	

## **Respiratory Sensitisation**

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

## Germ Cell Mutagenicity

Name	Route	Value
Oxydipropyl dibenzoate	In Vitro	Not mutagenic
Catalyst.	In Vitro	Not mutagenic

## Carcinogenicity

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

## **Reproductive Toxicity**

## **Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure
					Duration
Oxydipropyl dibenzoate	Ingestion	Not classified for female reproduction	Rat	NOAEL 500	2 generation
	-	-		mg/kg/day	-
Oxydipropyl dibenzoate	Ingestion	Not classified for male reproduction	Rat	NOAEL 400	2 generation
	_			mg/kg/day	-
Oxydipropyl dibenzoate	Ingestion	Not classified for development	Rat	NOAEL	during
	-			1,000	gestation
				mg/kg/day	-

## Target Organ(s)

## Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Catalyst.	Ingestion	nervous system	Not classified	Rat	NOAEL 2,000 mg/kg	

## Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Oxydipropyl dibenzoate	Ingestion	hematopoietic system   liver	Not classified	Rat	NOAEL 2,500 mg/kg/day	90 days

## Aspiration Hazard

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

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

## **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	Туре	Exposure	Test endpoint	Test result
Oxydipropyl dibenzoate	27138-31-4	Fathead minnow	Experimental	96 hours	LC50	3.7 mg/l
Oxydipropyl dibenzoate	27138-31-4	Green algae	Experimental	72 hours	EL50	4.9 mg/l
Oxydipropyl dibenzoate	27138-31-4	Water flea	Experimental	48 hours	EL50	19.31 mg/l
Oxydipropyl dibenzoate	27138-31-4	Green algae	Experimental	72 hours	EC10	0.89 mg/l
Styrene, polymer with 1,3-Butadiene, butylacrylate and methyl methacrylate	25101-28-4	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Catalyst.	Trade Secret	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Tert-butyl 3,5,5- trimethylperoxyhexano ate	13122-18-4	Green algae	Experimental	72 hours	ErC50	0.51 mg/l
Tert-butyl 3,5,5- trimethylperoxyhexano ate	13122-18-4	Rainbow trout	Experimental	96 hours	LC50	7.03 mg/l
Tert-butyl 3,5,5- trimethylperoxyhexano ate	13122-18-4	Water flea	Experimental	48 hours	EC50	>100 mg/l
Tert-butyl 3,5,5- trimethylperoxyhexano ate	13122-18-4	Green algae	Experimental	72 hours	NOEC	0.125 mg/l
Tert-butyl 3,5,5- trimethylperoxyhexano ate	13122-18-4	Water flea	Experimental	21 days	NOEC	0.22 mg/l
Tert-butyl 3,5,5- trimethylperoxyhexano ate	13122-18-4	Activated sludge	Experimental	3 hours	EC50	327.02 mg/l

## **12.2.** Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Oxydipropyl dibenzoate		Experimental Biodegradation	28 days		85 %CO2 evolution/THC O2 evolution	OECD 301B - Modified sturm or CO2

Styrene, polymer with 1,3- Butadiene, butylacrylate and methyl methacrylate	25101-28-4	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Catalyst.	Trade Secret	Experimental Biodegradation	28 days	CO2 evolution	29.1 %CO2 evolution/THC O2 evolution	OECD 301B - Modified sturm or CO2
Catalyst.	Trade Secret	Estimated Photolysis		Photolytic half-life (in air)	1.48 days (t 1/2)	
Tert-butyl 3,5,5- trimethylperoxyhexanoate	13122-18-4	Experimental Biodegradation	28 days	BOD	72 %BOD/ThO D	OECD 301D - Closed bottle test
Tert-butyl 3,5,5- trimethylperoxyhexanoate	13122-18-4	Experimental Aquatic Inherent Biodegrad.	56 days	BOD		OECD 302A - Modified SCAS Test
Tert-butyl 3,5,5- trimethylperoxyhexanoate	13122-18-4	Experimental Hydrolysis		Hydrolytic half-life (pH 7)		OECD 111 Hydrolysis func of pH

## 12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Oxydipropyl dibenzoate	27138-31-4	Modeled Bioconcentration		Bioaccumulation factor	8	Catalogic™
Styrene, polymer with 1,3- Butadiene, butylacrylate and methyl methacrylate	25101-28-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Catalyst.	Trade Secret	Experimental Bioconcentration		Log Kow	2.57	
Tert-butyl 3,5,5- trimethylperoxyhexanoate	13122-18-4	Modeled Bioconcentration		Bioaccumulation factor	380	Catalogic™
Tert-butyl 3,5,5- trimethylperoxyhexanoate	13122-18-4	Experimental Bioconcentration		Log Kow	5.16	OECD 117 log Kow HPLC method

## 12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
Catalyst.	Trade Secret	Estimated Mobility in Soil	Koc	<270 l/kg	ACD/Labs ChemSketch™
Tert-butyl 3,5,5- trimethylperoxyhexanoate	13122-18-4	Modeled Mobility in Soil	Koc	3,550 l/kg	Episuite™

## 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 substances20 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. The components of this product are in compliance with the new substance notification requirements of CEPA. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

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

Seveso hazard categories, Annex 1, Part 1 None

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

H242	Heating may cause a fire.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

## **Revision information:**

Section 2: <125ml Hazard - Environmental information was added.

Label: CLP Classification information was modified.

Label: CLP Environmental Hazard Statements information was modified.

Label: CLP Precautionary - Prevention information was modified.

Label: CLP Precautionary - Response information was modified.

Label: Graphic information was modified.

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

Section 8: Eye protection information information was added.

Section 8: Eye/face protection information information was deleted.

Section 8: Personal Protection - Eye information information was deleted.

Section 8: Personal Protection - Respiratory Information information was deleted.

Section 8: Personal Protection - Skin/body information information was added.

Section 8: Respiratory protection - recommended respirators guide information was deleted.

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

Section 8: Respiratory protection information information was added.

Section 8: Skin protection - protective clothing information information was added.

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

Section 09: Flammability information information was added.

Section 09: Odor information was modified.

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

Section 11: Acute Toxicity 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: Seveso Hazard Category Text information was deleted.

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

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

## 3M Ireland MSDSs are available at www.3M.com



## 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:	33-2643-6	Version number:	6.00
<b>Revision date:</b>	21/08/2023	Supersedes date:	08/02/2023

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<sup>™</sup> Scotch-Weld<sup>™</sup> Low Odor Acrylic Adhesive DP8825NS Green and Low Odor Acrylic Adhesive 8825NS Green, Part B

## Product Identification Numbers 62-2866-8530-0

62-2866-8530-0

7100067291

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

**Identified uses** Structural adhesive.

Only for 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 3555E Mail:tox.uk@mmm.comWebsite: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:**

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



Ingredient	CAS Nbr	EC No.	% by Wt
Tetrahydrofurfuryl methacrylate	2455-24-5	219-529-5	20 - 50
2-hydroxyethyl methacrylate	868-77-9	212-782-2	1 - 30
benzyltributylammonium chloride	23616-79-7	245-787-3	< 3
Poly[oxy(methyl-1,2-ethanediyl)], .a(2-methyl-1- oxo-2-propenyl)w(phosphonooxy)-	95175-93-2		< 3

## **HAZARD STATEMENTS:**

H315	Causes skin irritation.
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 effe

Harmful to aquatic life with long lasting effects.

## PRECAUTIONARY STATEMENTS

Prevention: P201 P280I	Obtain special instructions before use. 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 P280I	Obtain special instructions before use. 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.

3% of the mixture consists of components of unknown acute oral toxicity.

Contains 7% 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	20 - 50	Skin Sens. 1, H317
	(EC-No.) 219-529-5		Repr. 1B, H360D
	(REACH-No.) 01-		Aquatic Chronic 3, H412
	2120748481-53		
2-hydroxyethyl methacrylate	(CAS-No.) 868-77-9	1 - 30	Skin Irrit. 2, H315
	(EC-No.) 212-782-2		Eye Irrit. 2, H319
	(REACH-No.) 01-		Skin Sens. 1, H317
	2119490169-29		Nota D
Acrylonitrile - butadiene polymer	(CAS-No.) 9003-18-3	1 - 20	Substance not classified as hazardous
Kaolin, calcined	(CAS-No.) 92704-41-1	1 - 20	Substance not classified as hazardous
	(EC-No.) 296-473-8		

Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2- yl methacrylate	(CAS-No.) 7534-94-3 (EC-No.) 231-403-1	1 - 15	Aquatic Chronic 3, H412
Bisphenol A polyethylene glycol diether dimethacrylate (polymer)	(CAS-No.) 41637-38-1	0.1 - 10	Substance not classified as hazardous
naphthenic acids, copper salts	(CAS-No.) 1338-02-9 (EC-No.) 215-657-0	< 0.08	Flam. Liq. 3, H226 Acute Tox. 4, H302 Aquatic Acute 1, H400,M=10 Aquatic Chronic 1, H410,M=1
Non-hazardous Additive	Trade Secret	< 5	Substance not classified as hazardous
Poly[oxy(methyl-1,2-ethanediyl)], .a(2- methyl-1-oxo-2-propenyl)w (phosphonooxy)-	(CAS-No.) 95175-93-2	< 3	Skin Irrit. 2, H315 Eye Dam. 1, H318
benzyltributylammonium chloride	(CAS-No.) 23616-79-7 (EC-No.) 245-787-3	< 3	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 STOT SE 3, H335
tetrahydro-2-furyl-methanol	(CAS-No.) 97-99-4 (EC-No.) 202-625-6	< 1	Eye Irrit. 2, H319 Repr. 1B, H360Df

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

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

Irritation to the skin (localized redness, swelling, itching, and dryness). 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>
Carbon monoxide	During combustion.
Carbon dioxide.	During combustion.
Hydrogen Chloride	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 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. 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 heat. Store away from acids. Store away from strong bases. Store away from oxidising agents. Store away from amines.

#### 7.3. Specific end use(s)

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

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

## 8.1 Control parameters

#### **Occupational exposure limits**

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

#### **Biological limit values**

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

#### Derived no effect level (DNEL)

Ingredient	Degradation Product	Population	Human exposure pattern	DNEL
2-hydroxyethyl methacrylate		Worker	Dermal, Long-term exposure (8 hours), Systemic effects	1.3 mg/kg bw/d
2-hydroxyethyl methacrylate		Worker	Inhalation, Long-term exposure (8 hours), Systemic effects	4.9 mg/m <sup>3</sup>

## Predicted no effect concentrations (PNEC)

Ingredient	Degradation Product	Compartment	PNEC
2-hydroxyethyl methacrylate		Agricultural soil	0.476 mg/kg d.w.
2-hydroxyethyl methacrylate		Freshwater	0.482 mg/l
2-hydroxyethyl methacrylate		Freshwater sediments	3.79 mg/kg d.w.
2-hydroxyethyl methacrylate		Intermittent releases to water	1 mg/l
2-hydroxyethyl methacrylate		Marine water	0.482 mg/l
2-hydroxyethyl methacrylate		Marine water sediments	3.79 mg/kg d.w.
2-hydroxyethyl methacrylate		Sewage Treatment Plant	10 mg/l

**Recommended monitoring procedures:**Information on recommended monitoring procedures can be obtained from Indust. Inspect./Ministry (IE)

## **8.2. Exposure controls**

In addition, refer to the annex for more information.

## 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:

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

Applicable Norms/Standards Use gloves tested to EN 374

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

## **Respiratory protection**

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

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

#### 8.2.3. Environmental exposure controls

Refer to Annex

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

## 9.1. Information on basic physical and chemical properties

Physical state Specific Physical Form: Colour Odor Odour threshold Melting point/freezing point Boiling point/boiling range Flammability (solid, gas) Flammable Limits(LEL) Liquid. Paste White Acrylate *No data available.* >=37.8 °C Not applicable. *No data available.* 

- Flammable Limits(UEL) Flash point Autoignition temperature Decomposition temperature pH Kinematic Viscosity Water solubility Solubility- non-water Partition coefficient: n-octanol/water Vapour pressure Density Relative density Relative Vapour Density
- 9.2. Other information

9.2.2 Other safety characteristics EU Volatile Organic Compounds Evaporation rate Molecular weight No data available. > 93.3 °C [Test Method:Closed Cup] No data available. No data available. substance/mixture is non-soluble (in water) 109,649 mm<sup>2</sup>/sec Nil No data available. No data available. No data available. 1.14 g/ml 1.14 [Ref Std:WATER=1] No data available.

No data available. 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**

Heat. Sparks and/or flames.

## **10.5 Incompatible materials**

Amines. Strong acids. Strong bases. Strong oxidising agents.

## 10.6 Hazardous decomposition products

<u>Substance</u>

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 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. 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. 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.

#### **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
1 icute	IUMICIU

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-hydroxyethyl methacrylate	Dermal	Rabbit	LD50 > 5,000 mg/kg
2-hydroxyethyl methacrylate	Ingestion	Rat	LD50 5,564 mg/kg
Kaolin, calcined	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 2.07 mg/l
Kaolin, calcined	Dermal	similar compoun ds	LD50 > 5,000 mg/kg
Kaolin, calcined	Ingestion	similar compoun ds	LD50 > 5,000 mg/kg
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate	Dermal	Rabbit	LD50 > 3,000 mg/kg
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate	Ingestion	Rat	LD50 3,100 mg/kg
Acrylonitrile - butadiene polymer	Dermal	Rabbit	LD50 > 15,000 mg/kg
Acrylonitrile - butadiene polymer	Ingestion	Rat	LD50 > 30,000 mg/kg
Bisphenol A polyethylene glycol diether dimethacrylate (polymer)	Dermal	Rat	LD50 > 2,000 mg/kg
Bisphenol A polyethylene glycol diether dimethacrylate	Ingestion	Rat	LD50 > 35,000 mg/kg

(polymer)			
Poly[oxy(methyl-1,2-ethanediyl)], .a(2-methyl-1-oxo-2- propenyl)w(phosphonooxy)-	Ingestion	Rat	LD50 > 5,000 mg/kg
Poly[oxy(methyl-1,2-ethanediyl)], .a(2-methyl-1-oxo-2- propenyl)w(phosphonooxy)-	Dermal	similar health hazards	LD50 estimated to be > 5,000 mg/kg
benzyltributylammonium chloride	Ingestion	Not available	LD50 500 mg/kg
tetrahydro-2-furyl-methanol	Dermal	Professio nal judgeme nt	LD50 estimated to be 2,000 - 5,000 mg/kg
tetrahydro-2-furyl-methanol	Inhalation- Vapour (4 hours)	Rat	LC50 > 3.1 mg/l
tetrahydro-2-furyl-methanol	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

## ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
Tetrahydrofurfuryl methacrylate	Rabbit	No significant irritation
2-hydroxyethyl methacrylate	Rabbit	Minimal irritation
Kaolin, calcined	Rabbit	No significant irritation
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate	Rabbit	Mild irritant
Acrylonitrile - butadiene polymer	Professio	No significant irritation
	nal	
	judgemen	
	t	
Bisphenol A polyethylene glycol diether dimethacrylate (polymer)	Rabbit	Minimal irritation
Poly[oxy(methyl-1,2-ethanediyl)], .a(2-methyl-1-oxo-2-propenyl)w	Not	Irritant
(phosphonooxy)-	available	
benzyltributylammonium chloride	Guinea	Corrosive
	pig	
tetrahydro-2-furyl-methanol	Rabbit	No significant irritation
naphthenic acids, copper salts	Rabbit	No significant irritation

## Serious Eye Damage/Irritation

Name	Species	Value
Tetrahydrofurfuryl methacrylate	Rabbit	No significant irritation
2-hydroxyethyl methacrylate	Rabbit	Moderate irritant
Kaolin, calcined	Rabbit	No significant irritation
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate	Rabbit	Mild irritant
Acrylonitrile - butadiene polymer	Professio	No significant irritation
	nal	
	judgemen	
	t	
Bisphenol A polyethylene glycol diether dimethacrylate (polymer)	Rabbit	No significant irritation
Poly[oxy(methyl-1,2-ethanediyl)], .a(2-methyl-1-oxo-2-propenyl)w	Not	Corrosive
(phosphonooxy)-	available	
benzyltributylammonium chloride	similar	Corrosive
	health	
	hazards	
tetrahydro-2-furyl-methanol	Rabbit	Severe irritant
naphthenic acids, copper salts	In vitro	No significant irritation
	data	

## **Skin Sensitisation**

Name	Species	Value
Tetrahydrofurfuryl methacrylate	In vitro data	Sensitising
2-hydroxyethyl methacrylate	Human and animal	Sensitising
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate	Guinea pig	Not classified
Bisphenol A polyethylene glycol diether dimethacrylate (polymer)	Guinea pig	Not classified
tetrahydro-2-furyl-methanol	Mouse	Not classified
naphthenic acids, copper salts	Guinea pig	Not classified

## **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
Tetrahydrofurfuryl methacrylate	In Vitro	Not mutagenic
2-hydroxyethyl methacrylate	In vivo	Not mutagenic
2-hydroxyethyl methacrylate	In Vitro	Some positive data exist, but the data are not
		sufficient for classification
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate	In Vitro	Not mutagenic
Bisphenol A polyethylene glycol diether dimethacrylate (polymer)	In Vitro	Not mutagenic
tetrahydro-2-furyl-methanol	In Vitro	Not mutagenic

## Carcinogenicity

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

## **Reproductive Toxicity**

#### **Reproductive and/or Developmental Effects**

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-hydroxyethyl methacrylate	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
2-hydroxyethyl methacrylate	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	49 days
2-hydroxyethyl methacrylate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate	Ingestion	Not classified for female reproduction	Rat	NOAEL 500 mg/kg/day	premating into lactation
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate	Ingestion	Not classified for male reproduction	Rat	NOAEL 500 mg/kg/day	4 weeks
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate	Ingestion	Not classified for development	Rat	NOAEL 500 mg/kg/day	premating into lactation
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 mg/l	90 days
tetrahydro-2-furyl-methanol	Ingestion	Toxic to development	Rat	NOAEL 50 mg/kg/day	premating into lactation

## Target Organ(s)

## **Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Exo-1,7,7- trimethylbicyclo[2.2.1]hept -2-yl methacrylate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Poly[oxy(methyl-1,2- ethanediyl)], .a(2-methyl- 1-oxo-2-propenyl)w (phosphonooxy)-	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
benzyltributylammonium chloride	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	

## 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
Kaolin, calcined	Inhalation	pneumoconiosis	Not classified	similar compoun ds	NOAEL not available	occupational exposure
Exo-1,7,7- trimethylbicyclo[2.2.1]hep t-2-yl methacrylate	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 150 mg/kg/day	90 days
Exo-1,7,7- trimethylbicyclo[2.2.1]hep t-2-yl methacrylate	Ingestion	endocrine system   hematopoietic system   kidney and/or bladder	Not classified	Rat	NOAEL 500 mg/kg/day	90 days
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

## 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	Туре	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
2-hydroxyethyl methacrylate	868-77-9	Turbot	Analogous Compound	96 hours	LC50	833 mg/l
2-hydroxyethyl methacrylate	868-77-9	Fathead minnow	Experimental	96 hours	LC50	227 mg/l
2-hydroxyethyl methacrylate	868-77-9	Green algae	Experimental	72 hours	EC50	710 mg/l
2-hydroxyethyl methacrylate	868-77-9	Water flea	Experimental	48 hours	EC50	380 mg/l
2-hydroxyethyl methacrylate	868-77-9	Green algae	Experimental	72 hours	NOEC	160 mg/l
2-hydroxyethyl methacrylate	868-77-9	Water flea	Experimental	21 days	NOEC	24.1 mg/l
2-hydroxyethyl methacrylate	868-77-9	N/A	Experimental	16 hours	EC0	>3,000 mg/l
2-hydroxyethyl methacrylate	868-77-9	N/A	Experimental	18 hours	LD50	<98 mg per kg of bodyweight
Acrylonitrile - butadiene polymer	9003-18-3	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Kaolin, calcined	92704-41-1	Bacteria	Estimated	16 hours	EC10	1,400 mg/l
Kaolin, calcined	92704-41-1	Green algae	Estimated	72 hours	EC50	2,500 mg/l
Kaolin, calcined	92704-41-1	Water flea	Estimated	48 hours	EC50	>100 mg/l
Kaolin, calcined	92704-41-1	Zebra Fish	Estimated	96 hours	LC50	>100 mg/l
Kaolin, calcined	92704-41-1	Green algae	Estimated	72 hours	EC10	41 mg/l
Kaolin, calcined	92704-41-1	Rainbow trout	Estimated	30 days	NOEC	100 mg/l
Exo-1,7,7- trimethylbicyclo[2.2.1] hept-2-yl methacrylate	7534-94-3	Green algae	Experimental	72 hours	EC50	2.3 mg/l

trimedrybicyclog 22 11 Exp -2.3 rundlary 22 11 Exp -2.5 rundlary 22 1							
bight-2-juncture         juncture         juncture         juncture         juncture           Star-1,7,7         7534-94-3         Zohra Fish         Experimental         96 hours         LC30         .8 mg1           Exp-1,7,7         734-94-3         Green algae         Experimental         72 hours         EC10         0.751 mg1           Exp-1,7,7         734-94-3         Water flea         Experimental         72 hours         EC10         0.751 mg1           Exp-1,7,7         734-94-3         Water flea         Experimental         72 hours         EC10         0.751 mg1           Exp-1,7,7         734-94-3         Water flea         Experimental         72 hours         FL50         -1000 mg1           Green algae         Estimated         72 hours         FL50         -100 mg1         -100 mg1           Green algae         Estimated         72 hours         FL50         -100 mg1         -100 mg1           Green algae         Estimated         84 hours         FL50         -100 mg1         -100 mg1           Green algae         Estimated         96 hours         FL50         -100 mg1         -100 mg1           Green algae         Estimated         72 hours         EC50         0.629 mg1         -100 mg1 </td <td>Exo-1,7,7-</td> <td>7534-94-3</td> <td>Water flea</td> <td>Experimental</td> <td>48 hours</td> <td>EC50</td> <td>1.1 mg/l</td>	Exo-1,7,7-	7534-94-3	Water flea	Experimental	48 hours	EC50	1.1 mg/l
Fach 1, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,	trimethylbicyclo[2.2.1]						-
Fach 1, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,							
trimethylisyckol 22.11 FX0-1,7,7 trimethylisyckol 22.11 hert-24 methodrox 1754-14 hert-24 methodro		7534-94-3	Zehra Eish	Experimental	96 hours	L C 50	1.8 mg/l
bitsplet-2-1         constrained         constrained         constrained         constrained           Exo-1, 7, 7         753-94-3         Green algae         Experimental         72 hours         EC10         0.751 mg/l           Exo-1, 7, 7         753-94-3         Water flea         Experimental         71 days         NOEC         0.233 mg/l           Exo-1, 7, 7         753-94-3         Water flea         Experimental         71 days         NOEC         0.233 mg/l           Bitphon / A         polytelyloe glycol         41637-38-1         Activated shade         Estimated         3 hours         EC50         >1000 mg/l           Bitphon / A         (glymar)         41637-38-1         Green algae         Estimated         48 hours         EL50         >100 mg/l           Bitphon / A         (glymar)         41637-38-1         Water flea         Estimated         96 hours         L150         >100 mg/l           Bitphon / A         (glymar)         4138-02-9         Green algae         Estimated         96 hours         L150         0.629 mg/l           Bitphon / A         (glymar)         1338-02-9         Green algae         Estimated         96 hours         L150         0.756 mg/l           Bitinphon / A         (glymar)		7554-74-5		Experimental	50 HOUIS	LC50	1.0 mg/1
Exol. 1, 7.         7.5         1.50-1, 7.         7.51-04-3         Green algae         Experimental         7.2 hours         EC10         0.751 mg/l           https:2-1         rindettyrized         754-04-3         Water flea         Experimental         21 days         NOEC         0.233 mg/l           https:2-1         rindettyrized         rindettyrized         1.613-78-1         Activated shafe         Estimated         3 hours         FC50         > 1.000 mg/l           diather dimethacylate         rindettyrized         rindettyrized         72 hours         EL50         > 100 mg/l           idether dimethacylate         rindettyrized         rindettyrized         Reservation							
trimethybiosychol 2.1] hept-2-3y in editoryclute Exo-1, 7,7- trimethybiosychol 2.1] hept-2-4y in editoryclute Exo-1, 7,7- trimethybiosychol 2.1] hept-2-4y in editoryclute Bisphenol A polychybiosychol 2, 21] hept-2-4y in editoryclute (gov/mer) Hisphenol A polychybiosychol 2, 21] Hisphenol A Hisphenol A							
hept-2-iv methanylaricvaluer fleacontrolcontrol0.23 mg/ltrimethylicyclo[2.1] bept-2-vi methanylariNoEC0.23 mg/l0.23 mg/lBisphonol A polythyle glycol dather dimethacylateActivated sludgeEstimated3 hoursEC50>1,000 mg/lDisphonol A polythyle glycol dether dimethacylate41637-38-1 polythyle glycol dether dimethacylateActivated sludgeEstimated72 hoursEL50>100 mg/lBisphonol A polythyle glycol dether dimethacylate41637-38-1 polythyle glycol dether dimethacylateWater fleaEstimated48 hoursEL50>100 mg/lBisphonol A polythyle glycol dether dimethacylate41637-38-1 polythyle glycol dether dimethacylateZebra FishEstimated96 hoursLL50>100 mg/lBisphonol A polythyle glycol dether dimethacylate41637-38-1 polythyleZebra FishEstimated48 hoursEC500.629 mg/lBisphonol A polythyle glycol dether dimethacylate1338-02-9Green algaeEstimated48 hoursEC500.0756 mg/lCopper sils amphhetic acids, copper sils1338-02-9Vater fleaEstimated96 hoursLC500.0756 mg/lCopper sils amphhetic acids, copper sils1338-02-9Zebra FishEstimated32 daysNOEC0.132 mg/lCopper sils amphhetic acids, copper sils1338-02-9Scdiment WormEstimated7 daysNOEC0.132 mg/lSediment Worm copper sils1338-02-9Scdiment Worm <td>Exo-1,7,7-</td> <td>7534-94-3</td> <td>Green algae</td> <td>Experimental</td> <td>72 hours</td> <td>EC10</td> <td>0.751 mg/l</td>	Exo-1,7,7-	7534-94-3	Green algae	Experimental	72 hours	EC10	0.751 mg/l
hept-2-iv methanylaricvaluer fleacontrolcontrol0.23 mg/ltrimethylicyclo[2.1] bept-2-vi methanylariNoEC0.23 mg/l0.23 mg/lBisphonol A polythyle glycol dather dimethacylateActivated sludgeEstimated3 hoursEC50>1,000 mg/lDisphonol A polythyle glycol dether dimethacylate41637-38-1 polythyle glycol dether dimethacylateActivated sludgeEstimated72 hoursEL50>100 mg/lBisphonol A polythyle glycol dether dimethacylate41637-38-1 polythyle glycol dether dimethacylateWater fleaEstimated48 hoursEL50>100 mg/lBisphonol A polythyle glycol dether dimethacylate41637-38-1 polythyle glycol dether dimethacylateZebra FishEstimated96 hoursLL50>100 mg/lBisphonol A polythyle glycol dether dimethacylate41637-38-1 polythyleZebra FishEstimated48 hoursEC500.629 mg/lBisphonol A polythyle glycol dether dimethacylate1338-02-9Green algaeEstimated48 hoursEC500.0756 mg/lCopper sils amphhetic acids, copper sils1338-02-9Vater fleaEstimated96 hoursLC500.0756 mg/lCopper sils amphhetic acids, copper sils1338-02-9Zebra FishEstimated32 daysNOEC0.132 mg/lCopper sils amphhetic acids, copper sils1338-02-9Scdiment WormEstimated7 daysNOEC0.132 mg/lSediment Worm copper sils1338-02-9Scdiment Worm <td>trimethylbicyclo[2,2,1]</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	trimethylbicyclo[2,2,1]						
Exc. 1, 7, 7- trinchtybiscyl 2, 21No Water ReaExperimentul Experimentul21 daysNOEC0.233 mg/lhept-2, yt methacrylate41637-38-1 bisphenol AActivated sludgeEstimated3 hoursEC5>100 mg/l(durber and topletybive glycol dicted methaticsylate41637-38-1 bisphenol AGreen algaeEstimated72 hoursEL50>100 mg/l(golymer)1637-38-1 bisphenol A polytophive glycol dicted methaticsylate41637-38-1 bisphenol A polytophive glycol dicted methaticsylateAtter fleaEstimated48 hoursEL50>100 mg/lBisphenol A polytophive glycol dicted methaticsylate41637-38-1 bisphenol A polytophive glycol dicted methaticsylateZebra FishEstimated48 hoursEL50>100 mg/lBisphenol A polytophive glycol dicted methaticsylate1338-02-9Green algaeEstimated48 hoursEC500.0756 mg/lBisphenol A polytophive glycol dicted methatics acids, tophytophic glycol dicted methatics,1338-02-9Fetra Bismated96 hoursLC500.077 mg/lBisphenol A polytophic glycol dicted methatics,1338-02-9Fetra Bismated12 duysNOEC0.132 mg/lBisphenol A polytophic glycol dicted methatics,1338-02-9Fetra Bismated12 duysNOEC0.132 mg/lBisphenol A polytophic glycol dicted methatics,1338-02-9Fetra Bismated12 duysNOEC0.132 mg/lBisphenol A polytophic acids, topper sals1338-02-9Fetra Bismated<							
trimedrybingsch[2,2,1] herp:2-yin ethors/value Bisphon I A polychylone glycol defter dimethacrylate (polymer) Hop/senk/seg glycol defter dimethacrylate (polymer) Hop/s		7524.04.2	XXX ( Cl		21.1	NODO	0.000 //
hept-2-j methacrystei(ndth-drind methacrysta41637-38-1Water fleaEstimated48 hoursEL5041637-38-1Water fleaEstimated48 hoursEL5041637-38-1Water fleaEstimated48 hoursEL5041637-38-1Water fleaEstimated48 hoursEL5041637-38-1Water fleaSa for set		/534-94-3	Water flea	Experimental	21 days	NOEC	0.233 mg/l
Bisphenol A (gebyrner)         41637-38-1         Activated sludge         Estimated         3 hours         EC50         >1,000 mg/l           Bisphenol A (gebyrner)         41637-38-1         Green algae         Fstimated         72 hours         EL50         >100 mg/l           Bisphenol A (gebyrner)         41637-38-1         Green algae         Fstimated         72 hours         EL50         >100 mg/l           Bisphenol A (gebyrner)         41637-38-1         Water Bea         Estimated         48 hours         EL50         >100 mg/l           Bisphenol A (gebyrner)         41637-38-1         Zebra Fish         Estimated         96 hours         LL50         >100 mg/l           Bisphenol A (gebyrner)         41637-38-1         Zebra Fish         Estimated         96 hours         LL50         0.629 mg/l           Bisphenol A (gebyrner)         1338-02-9         Water Bea         Estimated         48 hours         EC50         0.676 mg/l           Taphthema acids, copper sits         1338-02-9         Zebra Fish         Estimated         32 days         EC10         0.0354 mg/l           Taphthema acids, copper sits         1338-02-9         Green algae         Estimated         N/A         NOEC         0.12 mg/l           Taphthema acids, copper sits         1338-02-9							
polychylene glycol (dichter dimetharylate (gotymer)     41637.38-1     Green algae     Estimated     72 hours     EL.50     >100 mg/l       Sipphenol A (bither dimetharylate (gotymer)     41637.38-1     Green algae     Estimated     48 hours     EL.50     >100 mg/l       Sipphenol A (bither dimetharylate (gotymer)     41637.38-1     Water flea     Estimated     48 hours     EL.50     >100 mg/l       Sipphenol A (bither dimetharylate (gotymer)     41637.38-1     Zebra Fish     Estimated     96 hours     LL50     >100 mg/l       Sipphenol A (bither dimetharylate (gotymer)     41637.38-1     Zebra Fish     Estimated     96 hours     LL50     0.629 mg/l       Gotymer)     Sisphenol A (sopper alls     1338-02-9     Green algae     Estimated     48 hours     EC50     0.0756 mg/l       copper alls     1338-02-9     Zebra Fish     Estimated     96 hours     LC50     0.07 mg/l       copper alls     1338-02-9     Fathead minnow     Estimated     N/A     NOEC     0.034 mg/l       copper alls     1338-02-9     Fathead minnow     Estimated     N/A     NOE     0.132 mg/l       copper alls     1338-02-9     Sediment Worm     Estimated     N/A     NOE     0.132 mg/l       copper alls     1338-02-9     SedimethWorm     Estimated </td <td>hept-2-yl methacrylate</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	hept-2-yl methacrylate						
polychylene glycol (dichter dimetharylate (gotymer)     41637.38-1     Green algae     Estimated     72 hours     EL.50     >100 mg/l       Sipphenol A (bither dimetharylate (gotymer)     41637.38-1     Green algae     Estimated     48 hours     EL.50     >100 mg/l       Sipphenol A (bither dimetharylate (gotymer)     41637.38-1     Water flea     Estimated     48 hours     EL.50     >100 mg/l       Sipphenol A (bither dimetharylate (gotymer)     41637.38-1     Zebra Fish     Estimated     96 hours     LL50     >100 mg/l       Sipphenol A (bither dimetharylate (gotymer)     41637.38-1     Zebra Fish     Estimated     96 hours     LL50     0.629 mg/l       Gotymer)     Sisphenol A (sopper alls     1338-02-9     Green algae     Estimated     48 hours     EC50     0.0756 mg/l       copper alls     1338-02-9     Zebra Fish     Estimated     96 hours     LC50     0.07 mg/l       copper alls     1338-02-9     Fathead minnow     Estimated     N/A     NOEC     0.034 mg/l       copper alls     1338-02-9     Fathead minnow     Estimated     N/A     NOE     0.132 mg/l       copper alls     1338-02-9     Sediment Worm     Estimated     N/A     NOE     0.132 mg/l       copper alls     1338-02-9     SedimethWorm     Estimated </td <td>Bisphenol A</td> <td>41637-38-1</td> <td>Activated sludge</td> <td>Estimated</td> <td>3 hours</td> <td>EC50</td> <td>&gt;1.000  mg/l</td>	Bisphenol A	41637-38-1	Activated sludge	Estimated	3 hours	EC50	>1.000  mg/l
dicher directioner value (golymer)     41637.38-1     Green algae     Estimated     72 hours     EL50     >100 mg/l       Bisphenol A (golymer)     41637.38-1     Green algae     Estimated     72 hours     EL50     >100 mg/l       Bisphenol A (golymer)     41637.38-1     Water flea     Estimated     48 hours     EL50     >100 mg/l       Bisphenol A (golymer)     41637.38-1     Zebra Fish     Estimated     96 hours     LL50     >100 mg/l       Bisphenol A (golymer)     41637.38-1     Zebra Fish     Estimated     96 hours     EC50     0.629 mg/l       Bisphenol A (golymer)     4138-02-9     Green algae     Estimated     48 hours     EC50     0.629 mg/l       apphtenic acids, copper salts     1338-02-9     Water flea     Estimated     48 hours     EC50     0.0756 mg/l       apphtenic acids, copper salts     1338-02-9     Fathead minnow     Estimated     32 days     EC10     0.0354 mg/l       apphtenic acids, copper salts     1338-02-9     Sediment Worm     Estimated     7 days     NOEC     0.12 mg/l       apphtenic acids, copper salts     1338-02-9     Sediment Worm     Estimated     7 days     NOEC     0.02 mg/l       apphtenic acids, copper salts     1338-02-9     Sediment Worm     Estimated     7 days <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>-,</td></td<>							-,
(polymer) (polymer) (polymer) (singhenol A polychylore glycol (dether dimethacylar (polymer))41637-38-1 Green algaeGreen algae EstimatedEstimated A Familie72 hoursEL-50>100 mg/l(polymer) (polymer) (polymer)41637-38-1Water fleaEstimated48 hoursEL-50>100 mg/l(polymer) (polymer) (polymer)41637-38-1Water fleaEstimated96 hoursEL-50>100 mg/l(polymer) (polymer)41637-38-1Zebra FishEstimated96 hoursLL50>100 mg/l(polymer) (polymer) (polymer) (polymer) (polymer) (polymer) (polymer) (polymer)41637-38-1Water fleaEstimated72 hoursErC500.629 mg/l(polymer) (polymer) (polymer) (polymer) (polymer) (polymer)24bra FishEstimated48 hoursEC500.0756 mg/l(polymer) (polymer) (polymer) (polymer)1338-02-9Fabraed minnowEstimated32 daysEC100.0354 mg/l(polymer) (polymer) (polymer)1338-02-9Fabraed minnowEstimatedN/ANOEC110 mg/kg (Dry Weight) (polymer)(polymer) (polymer) (polymer)1338-02-9Sedmert WormEstimatedN/ANOE100 mg/l(polymer) (polymer) (polymer)1338-02-9Sedmert Worm <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Bisphenol A opticytlyce gylcol dicther dimethacrylate (polymer)41637-38-1Green algaeEstimated72 hoursEL50>100 mg/lBisphenol A opticytlyce gylcol dicther dimethacrylate (polymer)41637-38-1Water fleaEstimated48 hoursEL50>100 mg/lBisphenol A opticytlyce gylcol dicther dimethacrylate (polymer)41637-38-1Xebra FishEstimated96 hoursL1.50>100 mg/lBisphenol A opticytlyce gylcol dicther dimethacrylate (polymer)1338-02-9Green algaeEstimated72 hoursExC500.629 mg/lBisphenol A opper salts1338-02-9Green algaeEstimated72 hoursExC500.0756 mg/lDepper salts copper salts1338-02-9Green algaeEstimated96 hoursLC500.0776 mg/lnaphtheric acids, copper salts1338-02-9Green algaeEstimatedN/ANOEC0.132 mg/lnaphtheric acids, copper salts1338-02-9Green algaeEstimatedN/ANOEC0.02 mg/lnaphtheric acids, copper salts1338-02-9Sediment WormEstimated7 daysNOEC0.02 mg/lnaphtheric acids, copper salts1338-02-9Sediment WormEstimated7 daysNOEC0.02 mg/lcopper salts copper salts1338-02-9Sediment WormEstimated7 daysNOEC0.02 mg/lcopper salts copper salts1338-02-9Soil microbesEstimated7 daysNOEC60 mg/kg (Dry Weight)copp							
polychycher glycol (dicher dimetharyshe (polymer))HaisEstimatedHainEstimatedBisphenol A polychycher glycol (dicher dimetharyshe (polymer))41637-38-1 (Singhenol A polychycher glycol (dicher dimetharyshe (polymer))A1637-38-1 (Singhenol A polychycher glycol (dicher dimetharyshe (polymer))14637-38-1 (Singhenol A polychycher glycol (dicher dimetharyshe (polymer))41637-38-1 (Singhenol A polychycher glycol (dicher dimetharyshe (polymer))1338-02-9Green algae (Estimated)96 hoursLL50>100 mg/lcopper salts copper salts1338-02-9Green algae (Estimated)Estimated)48 hoursEC500.0756 mg/lcopper salts copper salts1338-02-9Fathead minnowEstimated)32 daysEC100.0344 mg/lraphthenic acids, copper salts1338-02-9Green algaeEstimatedN/ANOEC0.132 mg/lraphthenic acids, copper salts1338-02-9Green algaeEstimatedN/ANOEC0.132 mg/lraphthenic acids, copper salts1338-02-9Green algaeEstimatedN/ANOEC0.02 mg/lraphthenic acids, copper salts1338-02-9Seliment WormEstimated7 daysNOEC0.02 mg/lraphthenic acids, copper salts1338-02-9Activated sludgeEstimatedN/AN/AN/Araphthenic acids, copper salts1338-02-9Soil microbesEstimatedS daysNOEC0.02 mg/lraphthenic acids, copper salts1338-02-9 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
dicher dimethacrylate (polymer)     4     4     5     5       Bisphenol A polychtylber glycol dicthor dimethacrylate (polymer)     4     4     8     FLS0     >100 mg/l       Bisphenol A polychtylber glycol dicthor dimethacrylate (polymer)     4     4     8     FLS0     >100 mg/l       Bisphenol A polychtylber glycol dicthor dimethacrylate (polymer)     4     4     8     FLS0     >100 mg/l       Bisphenol A polychtylber glycol dicthor dimethacrylate (polymer)     1338-02-9     Green algae     Estimated     72 hours     ErC50     0.629 mg/l       anaphthenic acids, copper salts     1338-02-9     Green algae     Estimated     96 hours     LC50     0.0776 mg/l       anaphthenic acids, copper salts     1338-02-9     Fathead minnow     Estimated     32 days     EC10     0.0354 mg/l       anaphthenic acids, copper salts     1338-02-9     Green algae     Estimated     7 days     NOEC     0.12 mg/l       anaphthenic acids, copper salts     1338-02-9     Sediment Worm     Estimated     7 days     NOEC     0.02 mg/l       anphthenic acids, copper salts     1338-02-9     Barley     Estimated     7 days     NOEC     0.02 mg/l       anphthenic acids, copper salts     1338-02-9     Redworm     Estimated     7 days     NOEC     0.02 mg/l <tr< td=""><td>Bisphenol A</td><td>41637-38-1</td><td>Green algae</td><td>Estimated</td><td>72 hours</td><td>EL50</td><td>&gt;100 mg/l</td></tr<>	Bisphenol A	41637-38-1	Green algae	Estimated	72 hours	EL50	>100 mg/l
dicher dimethacrylate (polymer)     4     4     5     5       Bisphenol A polychtylber glycol dicthor dimethacrylate (polymer)     4     4     8     FLS0     >100 mg/l       Bisphenol A polychtylber glycol dicthor dimethacrylate (polymer)     4     4     8     FLS0     >100 mg/l       Bisphenol A polychtylber glycol dicthor dimethacrylate (polymer)     4     4     8     FLS0     >100 mg/l       Bisphenol A polychtylber glycol dicthor dimethacrylate (polymer)     1338-02-9     Green algae     Estimated     72 hours     ErC50     0.629 mg/l       anaphthenic acids, copper salts     1338-02-9     Green algae     Estimated     96 hours     LC50     0.0776 mg/l       anaphthenic acids, copper salts     1338-02-9     Fathead minnow     Estimated     32 days     EC10     0.0354 mg/l       anaphthenic acids, copper salts     1338-02-9     Green algae     Estimated     7 days     NOEC     0.12 mg/l       anaphthenic acids, copper salts     1338-02-9     Sediment Worm     Estimated     7 days     NOEC     0.02 mg/l       anphthenic acids, copper salts     1338-02-9     Barley     Estimated     7 days     NOEC     0.02 mg/l       anphthenic acids, copper salts     1338-02-9     Redworm     Estimated     7 days     NOEC     0.02 mg/l <tr< td=""><td>polvethylene glycol</td><td></td><td></td><td></td><td></td><td></td><td>-</td></tr<>	polvethylene glycol						-
(polymer)         Inc.							
Bisphenol A polychylene glycol dieher dimethacrylate (polymer)41637-38-1Water fleaEstimated48 hoursEL.50>100 mg/lBisphenol A polychylene glycol diether dimethacrylate (polymer)41637-38-1Zebra FishEstimated96 hoursLL50>100 mg/lBisphenol A polychylene glycol diether dimethacrylate (polymer)1338-02-9Green algaeEstimated72 hoursErC500.629 mg/lcopper salts copper salts copper salts1338-02-9Water fleaEstimated96 hoursLC500.0756 mg/lcopper salts copper salts copper salts1338-02-9Zebra FishEstimated96 hoursLC500.0354 mg/lcopper salts copper salts1338-02-9Green algaeEstimated32 daysEC100.0354 mg/lcopper salts copper salts138-02-9Green algaeEstimated7 daysNOEC0.12 mg/lcopper salts copper salts138-02-9Sediment WormEstimated7 daysNOEC0.02 mg/lcopper salts copper salts1338-02-9Sediment WormEstimated7 daysNOEC0.02 mg/lcopper salts copper salts1338-02-9Sediment WormEstimated56 daysNOEC9 mg/kg (Dry Weight)copper salts copper salts1338-02-9Soil microbesEstimated28 daysNOEC9 mg/kg (Dry Weight)copper salts copper salts1338-02-9Soil microbesEstimated26 daysNOEC9 mg/kg (Dry Weight)copper sa							
polyethylene glycol diether dimetarylate (polymer) Bisphenol A polyethylene glycol diether dimetarylate (polymer) Bisphenol A polyethylene glycol diether dimetarylate (polymer) 1338-02-9 Green algae Estimated 2 hours EC50 0.629 mg/l Copper salts 1338-02-9 Cebra Fish Estimated 2 hours EC50 0.756 mg/l 0.0756 mg/l 0.0756 mg/l 0.0756 mg/l 0.0756 mg/l 0.0354 mg/l 0.035							
diether dimethærylate (polymer)         Informethærylate (polymer)		41637-38-1	Water flea	Estimated	48 hours	EL50	>100 mg/l
(polymer)         Image: Constraint of the second seco	polyethylene glycol						
(polymer)         Image: Constraint of the second seco	diether dimethacrylate						
Bisphenol A (polymer)     41637-38-1     Zebra Fish     Estimated     96 hours     LL50     >100 mg/t       diether dimethacrylate (polymer)     1338-02-9     Green algae     Estimated     72 hours     ErC50     0.629 mg/t       copper salts     naphthenic acids,     1338-02-9     Water flea     Estimated     48 hours     EC50     0.0756 mg/t       copper salts     1338-02-9     Zebra Fish     Estimated     96 hours     LC50     0.07 mg/t       aphthenic acids,     1338-02-9     Fathead minnow     Estimated     32 days     EC10     0.0354 mg/t       copper salts     1338-02-9     Green algae     Estimated     N/A     NOEC     0.132 mg/t       aphthenic acids,     1338-02-9     Green algae     Estimated     7 days     NOEC     0.103 cmg/t       aphthenic acids,     1338-02-9     Sediment Worm     Estimated     7 days     NOEC     0.02 mg/t       apphers alls     1338-02-9     Activated sludge     Estimated     7 days     NOEC     0.02 mg/t       copper salts     1338-02-9     Activated sludge     Estimated     7 days     NOEC     0.02 mg/t       aphthenic acids,     1338-02-9     Activated sludge     Estimated     56 days     NOEC     60 mg/kg (Dry Weight)       copp							
oplyethylene glycol dicherd michtaerylate (polymer)1338-02-9Green algaeEstimated72 hoursECC500.629 mg/lanaphthenic acids, copper salts1338-02-9Water fleaEstimated48 hoursECS00.0756 mg/lanaphthenic acids, copper salts1338-02-9Zebra FishEstimated96 hoursLC500.07 mg/lanaphthenic acids, copper salts1338-02-9Fathead minnowEstimated32 daysEC100.0354 mg/lanaphthenic acids, copper salts1338-02-9Green algaeEstimatedN/ANOEC0.132 mg/lanaphthenic acids, copper salts1338-02-9Green algaeEstimated28 daysNOEC110 mg/kg (Dry Weight)copper salts1338-02-9Sediment WormEstimated7 daysNOEC0.02 mg/lcopper salts1338-02-9Activated sludgeEstimatedN/AECS042 mg/lcopper salts1338-02-9Activated sludgeEstimatedN/AECS042 mg/lcopper salts1338-02-9BarleyEstimated56 daysNOEC60 mg/kg (Dry Weight)anaphthenic acids, copper salts1338-02-9Soil microbesEstimated56 daysNOEC60 mg/kg (Dry Weight)anaphthenic acids, copper salts1338-02-9Soil microbesEstimated28 daysNOEC107 mg/kg (Dry Weight)anaphthenic acids, copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)		41(27.20.1	71 51		0.01	11.50	> 100 //
diether dimethacrylate (polymer)Image: State of the st		4103/-38-1	Zeora Fish	Esumated	90 nours	LLSU	/~100 mg/1
(polymer)							
naphthenic acids, copper salts1338-02-9Green algaeEstimated72 hoursErC500.629 mg/lcopper salts naphthenic acids, copper salts1338-02-9Water fleaEstimated48 hoursEC500.07 mg/lnaphthenic acids, copper salts1338-02-9Zebra FishEstimated96 hoursLC500.07 mg/lnaphthenic acids, copper salts1338-02-9Fathead minnowEstimated32 daysEC100.0354 mg/lnaphthenic acids, copper salts1338-02-9Green algaeEstimatedN/ANOEC0.132 mg/lnaphthenic acids, copper salts1338-02-9Sediment WormEstimated28 daysNOEC110 mg/kg (Dry Weight)copper salts1338-02-9Sediment WormEstimated7 daysNOEC0.02 mg/lnaphthenic acids, copper salts1338-02-9Activated sludgeEstimatedN/AEC5042 mg/lcopper salts1338-02-9Activated sludgeEstimated56 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated26 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated28 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated26 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9<	diether dimethacrylate						
naphthenic acids, copper salts1338-02-9Green algaeEstimated72 hoursErC500.629 mg/lcopper salts naphthenic acids, copper salts1338-02-9Water fleaEstimated48 hoursEC500.07 mg/lnaphthenic acids, copper salts1338-02-9Zebra FishEstimated96 hoursLC500.07 mg/lnaphthenic acids, copper salts1338-02-9Fathead minnowEstimated32 daysEC100.0354 mg/lnaphthenic acids, copper salts1338-02-9Green algaeEstimatedN/ANOEC0.132 mg/lnaphthenic acids, copper salts1338-02-9Sediment WormEstimated28 daysNOEC110 mg/kg (Dry Weight)copper salts1338-02-9Sediment WormEstimated7 daysNOEC0.02 mg/lnaphthenic acids, copper salts1338-02-9Activated sludgeEstimatedN/AEC5042 mg/lcopper salts1338-02-9Activated sludgeEstimated56 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated26 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated28 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated26 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9<							
copper saltscoper saltscoper saltsnaphthenic acids, copper salts1338-02-9Zebra FishEstimated48 hoursEC500.0756 mg/lnaphthenic acids, copper salts1338-02-9Zebra FishEstimated96 hoursLC500.07 mg/lnaphthenic acids, copper salts1338-02-9Fathead minnowEstimated32 daysEC100.0354 mg/lnaphthenic acids, copper salts1338-02-9Green algaeEstimatedN/ANOEC0.132 mg/lcopper salts1338-02-9Sediment WormEstimated28 daysNOEC110 mg/kg (Dry Weight)copper salts1338-02-9Sediment WormEstimated7 daysNOEC0.02 mg/lcopper salts1338-02-9Activated sludgeEstimatedN/AEC5042 mg/lcopper salts1338-02-9Activated sludgeEstimatedN/AEC5042 mg/lcopper salts1338-02-9Activated sludgeEstimatedN/AEC5042 mg/lnaphthenic acids, copper salts1338-02-9RedwormEstimated4 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated4 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9Springtail <t< td=""><td></td><td>1228 02 0</td><td>Groop algaa</td><td>Estimated</td><td>72 hours</td><td>ErC50</td><td>0.620 mg/l</td></t<>		1228 02 0	Groop algaa	Estimated	72 hours	ErC50	0.620 mg/l
naphthenic acids, copper salts       1338-02-9       Water flea       Estimated       48 hours       EC50       0.0756 mg/l         copper salts       1338-02-9       Zebra Fish       Estimated       96 hours       LC50       0.07 mg/l         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         copper salts       1338-02-9       Sediment Worm       Estimated       7 days       NOEC       10 mg/kg (Dry Weight)         copper salts       1338-02-9       Water flea       Estimated       7 days       NOEC       0.02 mg/l         copper salts       1338-02-9       Water flea       Estimated       7 days       NOEC       0.02 mg/l         copper salts       1338-02-9       Activated sludge       Estimated       N/A       EC50       42 mg/l         copper salts       1338-02-9       Redworm       Estimated       56 days       NOEC       60 mg/kg (Dry Weight)         copper salts       1338-02-9       Soil microbes       Estimated       4 days       NOEC       72 mg/kg (Dry Weight)         copper salts <t< td=""><td></td><td>1338-02-9</td><td>Ofeen algae</td><td>Estimated</td><td>72 Hours</td><td>EIC30</td><td>0.029 mg/1</td></t<>		1338-02-9	Ofeen algae	Estimated	72 Hours	EIC30	0.029 mg/1
copper salts2222222222222222222222222222222232233 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>							
naphthenic acids, copper salts1338-02-9Zebra FishEstimated96 hoursLC500.07 mg/lcopper salts1338-02-9Fathead minnowEstimated32 daysEC100.0354 mg/lnaphthenic acids, copper salts1338-02-9Green algaeEstimatedN/ANOEC0.132 mg/lnaphthenic acids, copper salts1338-02-9Sediment WormEstimated28 daysNOEC110 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Water fleaEstimated7 daysNOEC0.02 mg/lnaphthenic acids, copper salts1338-02-9Activated sludgeEstimatedN/AEC5042 mg/lnaphthenic acids, copper salts1338-02-9Activated sludgeEstimated4 daysNOEC96 mg/kg (Dry Weight)copper salts1338-02-9RedwormEstimated56 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9RedwormEstimated4 daysNOEC72 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-	naphthenic acids,	1338-02-9	Water flea	Estimated	48 hours	EC50	0.0756 mg/l
naphthenic acids, copper salts1338-02-9Zebra FishEstimated96 hoursLC500.07 mg/lcopper salts1338-02-9Fathead minnowEstimated32 daysEC100.0354 mg/lnaphthenic acids, copper salts1338-02-9Green algaeEstimatedN/ANOEC0.132 mg/lnaphthenic acids, copper salts1338-02-9Sediment WormEstimated28 daysNOEC110 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Water fleaEstimated7 daysNOEC0.02 mg/lnaphthenic acids, copper salts1338-02-9Activated sludgeEstimatedN/AEC5042 mg/lnaphthenic acids, copper salts1338-02-9Activated sludgeEstimated4 daysNOEC96 mg/kg (Dry Weight)copper salts1338-02-9RedwormEstimated56 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9RedwormEstimated4 daysNOEC72 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-	copper salts						
copper salts1338-02-9Fathead minnowEstimated32 daysEC100.0354 mg/lnaphthenic acids, copper salts1338-02-9Green algaeEstimatedN/ANOEC0.132 mg/lnaphthenic acids, copper salts1338-02-9Sediment WormEstimated28 daysNOEC110 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Water fleaEstimated7 daysNOEC0.02 mg/lnaphthenic acids, copper salts1338-02-9Water fleaEstimatedN/AEC5042 mg/lnaphthenic acids, copper salts1338-02-9BarleyEstimated4 daysNOEC96 mg/kg (Dry Weight)copper salts1338-02-9BarleyEstimated4 daysNOEC96 mg/kg (Dry Weight)copper salts1338-02-9BarleyEstimated4 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated4 daysNOEC72 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC		1338-02-9	Zebra Fish	Estimated	96 hours	LC50	0.07 mg/l
naphthenic acids, copper salts1338-02-9Fathead minnowEstimated32 daysEC100.0354 mg/lcopper salts1338-02-9Green algaeEstimatedN/ANOEC0.132 mg/lnaphthenic acids, copper salts1338-02-9Sediment WormEstimated28 daysNOEC110 mg/kg (Dry Weight)anaphthenic acids, copper salts1338-02-9Water fleaEstimated7 daysNOEC0.02 mg/lanaphthenic acids, copper salts1338-02-9Activated sludgeEstimatedN/AEC5042 mg/lcopper salts1338-02-9Activated sludgeEstimated56 daysNOEC96 mg/kg (Dry Weight)copper salts1338-02-9RedwormEstimated56 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated4 daysNOEC72 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated4 daysNOEC72 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 days		1550 02 7		Estimated	50 Hours	LC50	0.07 mg/1
copper saltsImage: Comper salts </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
naphthenic acids, copper salts1338-02-9Green algaeEstimatedN/ANOEC0.132 mg/lcopper salts1338-02-9Sediment WormEstimated28 daysNOEC110 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Water fleaEstimated7 daysNOEC0.02 mg/lnaphthenic acids, copper salts1338-02-9Activated sludgeEstimatedN/AEC5042 mg/lcopper salts1338-02-9BarleyEstimated4 daysNOEC96 mg/kg (Dry Weight)copper salts1338-02-9BarleyEstimated56 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9RedwormEstimated56 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC72 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Springt		1338-02-9	Fathead minnow	Estimated	32 days	EC10	0.0354 mg/l
copper saltscommentcommentEstimated28 daysNOEC110 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Water fleaEstimated7 daysNOEC0.02 mg/lnaphthenic acids, copper salts1338-02-9Water fleaEstimated7 daysNOEC0.02 mg/lnaphthenic acids, copper salts1338-02-9Activated sludgeEstimatedN/AEC5042 mg/lnaphthenic acids, copper salts1338-02-9RedwormEstimated56 daysNOEC96 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9RedwormEstimated56 daysNOEC60 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Soil microbesEstimated28 daysNOEC72 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated72 hoursN/AN/Aherdhylor.do95 not an at available or in	copper salts						
copper saltscommentcommentEstimated28 daysNOEC110 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Water fleaEstimated7 daysNOEC0.02 mg/lnaphthenic acids, copper salts1338-02-9Water fleaEstimated7 daysNOEC0.02 mg/lnaphthenic acids, copper salts1338-02-9Activated sludgeEstimatedN/AEC5042 mg/lnaphthenic acids, copper salts1338-02-9RedwormEstimated56 daysNOEC96 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9RedwormEstimated56 daysNOEC60 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Soil microbesEstimated28 daysNOEC72 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated72 hoursN/AN/Aherdhylor.do95 not an at available or in	nanhthenic acids	1338-02-9	Green algae	Estimated	N/A	NOEC	0 132 mg/l
naphthenic acids, copper salts1338-02-9Sediment WormEstimated28 daysNOEC110 mg/kg (Dry Weight)copper salts1338-02-9Water fleaEstimated7 daysNOEC0.02 mg/lcopper salts1338-02-9Activated sludgeEstimatedN/AEC5042 mg/lcopper salts1338-02-9BarleyEstimated4 daysNOEC96 mg/kg (Dry Weight)copper salts1338-02-9BarleyEstimated4 daysNOEC96 mg/kg (Dry Weight)copper salts1338-02-9BarleyEstimated4 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated4 daysNOEC72 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Soil microbesEstimated28 daysNOEC72 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9N/AData not available or insufficient for classificationN/AN/AN/Apoperlyl, w (phosphonoxy)-95175-93-2N/AData not available or insufficient for classificationN/AN/AN/Apropenyl), w (phosphonoxy)-97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Weder fle		1550 02 9	Green uigue	Estimated	1,771	I OLC	0.152 mg/1
copper saltsComper saltsComper saltsnaphthenic acids, copper salts1338-02-9Activated sludgeEstimated7 daysNOEC0.02 mg/lnaphthenic acids, copper salts1338-02-9Activated sludgeEstimatedN/AEC5042 mg/lnaphthenic acids, copper salts1338-02-9BarleyEstimated4 daysNOEC96 mg/kg (Dry Weight)copper salts1338-02-9BarleyEstimated56 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated28 daysNOEC72 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9N/AData not available or insufficient for classificationN/AN/AN/APoly[oxy(methyl-1,2- (phosphonoxy)-95175-93-2N/AData not available or insufficient for classificationN/AN/AN/Apropenyl)w (phosphonoxy)-97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4WedkaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algae <td></td> <td>1000 00 0</td> <td></td> <td><b>P</b> 1</td> <td>0.0.1</td> <td>NODO</td> <td></td>		1000 00 0		<b>P</b> 1	0.0.1	NODO	
naphthenic acids, copper salts1338-02-9Water fleaEstimated7 daysNOEC0.02 mg/lnaphthenic acids, copper salts1338-02-9Activated sludgeEstimatedN/AEC5042 mg/lnaphthenic acids, copper salts1338-02-9BarleyEstimated4 daysNOEC96 mg/kg (Dry Weight)copper salts1338-02-9RedwormEstimated56 daysNOEC60 mg/kg (Dry Weight)copper salts1338-02-9RedwormEstimated4 daysNOEC72 mg/kg (Dry Weight)copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9SpringtailEstimatedN/AN/AN/Anaphthenic acids, copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9SpringtailEstimatedN/AN/AN/Anethardiful) (acides)23616-79-7N/AData not available or insufficient for classificationN/AN/AN/APoly[oxy(methyl-1,2- (phosphonooxy)-95175-93-2N/AData not available or insufficient for classificationN/AN/AN/Atetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetra	naphthenic acids,	1338-02-9	Sediment Worm	Estimated	28 days	NOEC	110 mg/kg (Dry Weight)
copper saltsImage: Comparison of the comp	copper salts						
copper saltsImage: Comparison of the comp	naphthenic acids.	1338-02-9	Water flea	Estimated	7 davs	NOEC	0.02 mg/l
naphthenic acids, copper salts1338-02-9Activated sludgeEstimatedN/AEC5042 mg/lnaphthenic acids, copper salts1338-02-9BarleyEstimated4 daysNOEC96 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9RedwormEstimated56 daysNOEC60 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Soil microbesEstimated28 daysNOEC72 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)opper salts1338-02-9SpringtailEstimatedN/AN/AN/AN/Apoper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)opper salts1338-02-9SpringtailEstimatedN/AN/AN/Apoper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)opper salts1338-02-9N/AData not available or insufficient for classificationN/AN/AN/Apoly[oxy(methyl-1,2- ethanediy])], a(2- methanolN/AData not available or insufficient for classificationN/AN/AN/Apropenyl>.w (phosphonoxy)-97-99-4Green algaeExperimental72 hoursEC50>100 mg/l <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr<>							
copper saltsInterferenceInterferenceInterferenceInterferenceInterferenceanaphthenic acids, copper salts1338-02-9BarleyEstimated56 daysNOEC96 mg/kg (Dry Weight)anaphthenic acids, copper salts1338-02-9RedwormEstimated56 daysNOEC72 mg/kg (Dry Weight)anaphthenic acids, copper salts1338-02-9Soil microbesEstimated4 daysNOEC72 mg/kg (Dry Weight)anaphthenic acids, copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)benzyltributylammoniu m chloride1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)benzyltributylammoniu m chloride23616-79-7N/AData not available or insufficient for classificationN/AN/AN/APoly[oxy(methyl-1,2,- ethanediyl)], a(2- methyl-1-cxo-2- (phosphonooxy)-95175-93-2N/AData not available or insufficient for classificationN/AN/APoly[oxy(methyl-1,2,- (phosphonooxy)-97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4MedakaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursNOEC>100 mg/l		1220.02.0				ECCA	42 //
naphthenic acids, copper salts1338-02-9BarleyEstimated4 daysNOEC96 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9RedwormEstimated56 daysNOEC60 mg/kg (Dry Weight)aphthenic acids, copper salts1338-02-9Soil microbesEstimated4 daysNOEC72 mg/kg (Dry Weight)aphthenic acids, copper salts1338-02-9Soil microbesEstimated28 daysNOEC167 mg/kg (Dry Weight)aphthenic acids, copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)aphthenic acids, copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)aphthenic acids, copper salts1338-02-9N/AData not available or insufficient for classificationN/AN/AN/APoly[oxy(methyl-1,2- ethanedyl)], a(2- propenyl)-w (phosphonoxy)-95175-93-2N/AData not available or insufficient for classificationN/AN/AN/Atetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursNOEC>100 mg/l		1338-02-9	Activated sludge	Estimated	N/A	EC50	42 mg/1
copper saltsImage: Comper salts </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
copper saltsImage: Comper salts </td <td>naphthenic acids,</td> <td>1338-02-9</td> <td>Barley</td> <td>Estimated</td> <td>4 days</td> <td>NOEC</td> <td>96 mg/kg (Dry Weight)</td>	naphthenic acids,	1338-02-9	Barley	Estimated	4 days	NOEC	96 mg/kg (Dry Weight)
naphthenic acids, copper salts1338-02-9RedwormEstimated56 daysNOEC60 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9Soil microbesEstimated4 daysNOEC72 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts23616-79-7N/AData not available or insufficient for classificationN/AN/AN/APoly[oxy(methyl-1,2- ethandiyl]], a(2- methyl-1-oxo-2- propenyl)w (phosphonoxy)-95175-93-2N/AData not available or insufficient for classificationN/AN/AN/AVertarbydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursEC50>100 mg/l							8 8 9 9 9 9 9
copper saltscomper saltscomper saltscomper saltscomper saltsNOEC72 mg/kg (Dry Weight)aphthenic acids, copper salts1338-02-9SpringtailEstimated4 daysNOEC167 mg/kg (Dry Weight)aphthenic acids, copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)benzyltributylammoniu m chloride23616-79-7N/AData not available or insufficient for classificationN/AN/AN/APoly[oxy(methyl-1,2- ethanediyl)], a(2- methyl-1-oxo-2- propenyl)w (phosphonoxy)-95175-93-2N/AData not available or insufficient for classificationN/AN/AVerander97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental48 hoursEC50>100 mg/l		1220 02 0	D - J	E-time et a d	56 1	NOEC	(0 m = /le = (Dm = Wei = ht)
naphthenic acids, copper salts1338-02-9Soil microbesEstimated4 daysNOEC72 mg/kg (Dry Weight)naphthenic acids, copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)copper salts23616-79-7N/AData not available or insufficient for classificationN/AN/AN/APoly[oxy(methyl-1,2- ethanediyl)], a(2- methyl-1-oxo-2- propenyl)w (phosphonooxy)-95175-93-2N/AData not available or insufficient for classificationN/AN/AVerarbay97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursEC50>100 mg/l		1330-02-9	Keuworm	Estimated	50 days	NUEC	ov mg/kg (Dry weight)
copper saltsImage: solution of the second secon							
copper saltsImage: solution of the second secon	naphthenic acids,	1338-02-9	Soil microbes	Estimated	4 days	NOEC	72 mg/kg (Dry Weight)
Inabithenic acids, copper salts1338-02-9SpringtailEstimated28 daysNOEC167 mg/kg (Dry Weight)benzyltributylammoniu m chloride23616-79-7N/AData not available or insufficient for classificationN/AN/AN/APoly[oxy(methyl-1,2- ethanediyl)], .a(2- methyl-1-oxo-2- propenyl)w (phosphonooxy)-95175-93-2N/AData not available or insufficient for classificationN/AN/AN/APoly[oxy(methyl-1,2- ethanediyl)], .a(2- methyl-1-oxo-2- propenyl)w (phosphonooxy)-97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4MedakaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursNOEC>100 mg/l	1 /				5		
copper saltsImage: Competence of the second sec		1228 02 0	Springta:1	Estimated	28 days	NOEC	167 mg/kg (Dmy W-:-1-1)
benzyltributylammoniu m chloride23616-79-7N/AData not available or insufficient for classificationN/AN/AN/APoly[oxy(methyl-1,2- ethanediyl)], .a(2- methyl-1-oxo-2- propenyl)w (phosphonooxy)-95175-93-2N/AData not available or insufficient for classificationN/AN/AN/A97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4MedakaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursLC50>100 mg/l		1558-02-9	Springtall	Esumated	20 days	NUEC	107 mg/kg (Dry weight)
m chlorideor insufficient for classificationor insufficient for classificationN/APoly[oxy(methyl-1,2- ethanediyl)], .a(2- methyl-1-oxo-2- propenyl)w (phosphonooxy)-95175-93-2N/AData not available or insufficient for classificationN/AN/AVM/AData not available or insufficient for classificationN/AN/AN/A(phosphonooxy)-97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4MedakaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursNOEC>100 mg/l							l
Lettahydro-2-furyl- methanol97-99-4MedakaExperimental Experimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4MedakaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4MedakaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursNOEC>100 mg/l	benzyltributylammoniu	23616-79-7	N/A	Data not available	N/A	N/A	N/A
Lettahydro-2-furyl- methanol97-99-4MedakaExperimental Experimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4MedakaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4MedakaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursNOEC>100 mg/l	m chloride			or insufficient for			
Poly[oxy(methyl-1,2- ethanediyl)], .a(2- methyl-1-oxo-2- propenyl)w (phosphonooxy)-95175-93-2N/AData not available or insufficient for classificationN/AN/A(phosphonooxy)- tetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4MedakaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursNOEC>100 mg/l							
ethanediy[)], .a(2- methyl-1-oxo-2- propenyl)w (phosphonooxy)-or insufficient for classificationor insufficient for classification(phosphonooxy)- tetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4MedakaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursNOEC>100 mg/l	Delvier eth 112	05175 02 2	NI/A		NI/A	NI/A	
methyl-1-oxo-2- propenyl)w (phosphonooxy)-classificationclassificationclassificationtetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4MedakaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursNOEC>100 mg/l		731/3-93-2	IN/A		IN/A	IN/A	IN/A
propenyl)w (phosphonooxy)-97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4MedakaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursNOEC>100 mg/l							1
propenyl)w (phosphonooxy)-97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4MedakaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursNOEC>100 mg/l	methyl-1-oxo-2-			classification			
(phosphonooxy)-Center algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4MedakaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4MedakaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursNOEC>100 mg/l							
tetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4MedakaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Green algaeExperimental72 hoursNOEC>100 mg/l							
methanolImage: Constraint of the second		07.00.4	C	E-mark (1	72 1	EC50	> 100
tetrahydro-2-furyl- methanol97-99-4MedakaExperimental96 hoursLC50>100 mg/ltetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- tetrahydro-2-furyl-97-99-4Green algaeExperimental72 hoursNOEC>100 mg/l		97-99-4	Green aigae	Experimental	/∠ nours	EC30	>100 mg/1
methanol     Image: Constraint of the second s							
methanol     Image: Constraint of the second s	tetrahydro-2-furyl-	97-99-4	Medaka	Experimental	96 hours	LC50	>100 mg/l
tetrahydro-2-furyl- methanol97-99-4Water fleaExperimental48 hoursEC50>100 mg/ltetrahydro-2-furyl- tetrahydro-2-furyl-97-99-4Green algaeExperimental72 hoursNOEC>100 mg/l				1			
methanol fetrahydro-2-furyl- 97-99-4 Green algae Experimental 72 hours NOEC >100 mg/l		07 00 4	Water flee	Exporimental	19 hours	EC50	>100 mg/l
tetrahydro-2-furyl- 97-99-4 Green algae Experimental 72 hours NOEC >100 mg/l		7/-77-4	water nea	Experimental	40 HOUIS	LC30	-100 mg/1
	tetrahydro-2-furyl-	97-99-4	Green algae	Experimental	72 hours	NOEC	>100 mg/l
incuranoi i i i i i i i i i i i i i i i i i i	methanol						
		1	1	1		1	

tetrahydro-2-furyl-	97-99-4	Water flea	Experimental	21 days	NOEC	>100 mg/l
methanol						

## 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
2-hydroxyethyl methacrylate	868-77-9	Experimental Biodegradation	28 days	BOD	84 %BOD/CO D	OECD 301D - Closed bottle test
2-hydroxyethyl methacrylate	868-77-9	Experimental Hydrolysis		Hydrolytic half-life basic pH	10.9 days (t 1/2)	OECD 111 Hydrolysis func of pH
Acrylonitrile - butadiene polymer	9003-18-3	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Kaolin, calcined	92704-41-1	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Exo-1,7,7- trimethylbicyclo[2.2.1]hept- 2-yl methacrylate	7534-94-3	Experimental Biodegradation	28 days	CO2 evolution	70 %CO2 evolution/THC O2 evolution	OECD 310 CO2 Headspace
Bisphenol A polyethylene glycol diether dimethacrylate (polymer)	41637-38-1	Experimental Biodegradation	28 days	Percent degraded	24 %degraded	
naphthenic acids, copper salts	1338-02-9	Data not availbl- insufficient	N/A	N/A	N/A	N/A
benzyltributylammonium chloride	23616-79-7	Estimated Biodegradation	28 days	BOD	3.9 %BOD/Th OD	OECD 301C - MITI test (I)
Poly[oxy(methyl-1,2- ethanediyl)], .a(2-methyl- 1-oxo-2-propenyl)w (phosphonooxy)-	95175-93-2	Data not availbl- insufficient	N/A	N/A	N/A	N/A
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 Hydrolysis		Hydrolytic half-life (pH 7)	>1 years (t 1/2)	OECD 111 Hydrolysis func of pH

## **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
2-hydroxyethyl methacrylate	868-77-9	Experimental Bioconcentration		Log Kow	0.42	OECD 107 log Kow shke flsk mtd
Acrylonitrile - butadiene polymer	9003-18-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Kaolin, calcined	92704-41-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Exo-1,7,7- trimethylbicyclo[2.2.1]hept -2-yl methacrylate	7534-94-3	Modeled Bioconcentration		Bioaccumulation factor	39	Catalogic™
Exo-1,7,7- trimethylbicyclo[2.2.1]hept -2-yl methacrylate	7534-94-3	Experimental Bioconcentration		Log Kow	5.09	OECD 117 log Kow HPLC method
Bisphenol A polyethylene glycol diether dimethacrylate (polymer)	41637-38-1	Estimated Bioconcentration		Bioaccumulation factor	6.6	
naphthenic acids, copper salts	1338-02-9	Analogous Compound BCF - Fish	42 days	Bioaccumulation factor	≤27	OECD305-Bioconcentration
benzyltributylammonium chloride	23616-79-7	Estimated Bioconcentration		Bioaccumulation factor	31.7	
Poly[oxy(methyl-1,2- ethanediyl)], .a(2-methyl-	95175-93-2	Data not available or insufficient for	N/A	N/A	N/A	N/A

1-oxo-2-propenyl)w (phosphonooxy)-		classification			
tetrahydro-2-furyl-	97-99-4	Experimental	Log Kow	-0.11	OECD 107 log Kow shke
methanol		Bioconcentration			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™
2-hydroxyethyl methacrylate	868-77-9	Experimental Mobility in Soil	Koc	42.7 l/kg	
Exo-1,7,7- trimethylbicyclo[2.2.1]hept -2-yl methacrylate	7534-94-3	Experimental Mobility in Soil	Koc	, 0	OECD 121 Estim. of Koc by HPLC
tetrahydro-2-furyl- methanol	97-99-4	Modeled Mobility in Soil	Koc	2 l/kg	Episuite™

## 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. 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 substances20 01 27\*Paint, inks, adhesives and resins containing dangerous substances

## **SECTION 14: Transportation information**

Not hazardous for transportation.

Groun (ADR)	l Transport	Air Transport (IATA)	Marine Transport (IMDG)
----------------	-------------	----------------------	----------------------------

other for
-

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. 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. 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 listed on the active portion of the TSCA Inventory.

## DIRECTIVE 2012/18/EU

Seveso hazard categories, Annex 1, Part 1 None

Seveso named dangerous substances, Annex 1, Part 2

Dangerous Substances	Identifier(s)	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
naphthenic acids, copper salts	1338-02-9	10	50

## 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

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
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.
H335	May cause respiratory irritation.
H360D	May damage the unborn child.
H360Df	May damage the unborn child. Suspected of damaging fertility.
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:**

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

Section 2: <125ml Hazard - Health information was modified.

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

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

CLP: Ingredient table information was modified.

Label: CLP Classification information was modified.

Label: CLP Percent Unknown information was modified.

Label: CLP Precautionary - Prevention information was modified.

Label: CLP Precautionary - Response information was modified.

Label: Graphic information was modified.

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

Section 04: First Aid - Symptoms and Effects (CLP) information was added.

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

Section 04: Information on toxicological effects information was modified.

Section 8: 8.2. Exposure controls information information was added.

Section 8: 8.2.3. Environmental exposure controls information information was added.

Section 8: DNEL table row information was added.

Section 8: Eye/face protection information information was modified.

Section 8: Personal Protection - Skin/body information information was added.

Section 8: PNEC table row information was added.

- Section 8: Skin protection protective clothing information information was added.
- Section 11: Acute Toxicity table information was modified.
- Section 11: Germ Cell Mutagenicity Table information was modified.
- Section 11: Health Effects Eye information information was modified.
- Section 11: Health Effects Ingestion 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: 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.

Annex: Prediction of exposure statement 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.

## Annex

1. Title	
Substance identification	2-hydroxyethyl methacrylate; EC No. 212-782-2; CAS Nbr 868-77-9;
Exposure Scenario Name	Industrial Use of Adhesives and Sealants
Lifecycle Stage	Use at industrial sites
Contributing activities	PROC 05 -Mixing or blending in batch processes PROC 13 -Treatment of articles by dipping and pouring ERC 05 -Use at industrial site leading to inclusion into/onto article
Processes, tasks and activities covered	Manual application of product. Mixing operations (open systems).
2. Operational conditions and risk management measures	
Operating Conditions	Physical state:Liquid. General operating conditions: Duration of use: 8 hours/day; Frequency of exposure at workplace [for one worker]: 5 days/week; Indoor use;
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: Goggles - Chemical resistant; Environmental: None needed;
Waste management measures	No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions:
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

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