

Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006), as amended for GB.

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

1.1. Product identifier

3M[™] Scotch-Weld[™] Low Odor Acrylic Adhesive DP8825NS Green and Low Odor Acrylic Adhesive 8825NS Green, Part B

Product Identification Numbers

62-2866-8530-0

7100067291

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

Identified uses Structural adhesive.

1.3. Details of the supplier of the safety data sheet

Address:3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.Telephone:+44 (0)1344 858 000E Mail:tox.uk@mmm.comWebsite:www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

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 The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

SIGNAL WORD DANGER.

DINIOLIU

Symbols

GHS05 (Corrosion) |GHS07 (Exclamation mark) |GHS08 (Health Hazard) |

Pictograms

H412



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

HAZARD STATEMENTS:

H315	Causes skin irritation.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H360D	May damage the unborn child.

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 statement	'S		
Prevention: P201 P280I	Obtain special instructions before use. Wear protective gloves, eye/face protection, and respiratory protection.		
Response: P305 + P351 + P338 P310 P333 + P313	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor/physician. 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], as amended for GB
Tetrahydrofurfuryl methacrylate	(CAS-No.) 2455-24-5 (EC-No.) 219-529-5	20 - 50	Skin Sens. 1, H317 Repr. 1B, H360D Aquatic Chronic 3, H412
2-hydroxyethyl methacrylate	(CAS-No.) 868-77-9 (EC-No.) 212-782-2	1 - 30	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Nota D
Acrylonitrile - butadiene polymer	(CAS-No.) 9003-18-3	1 - 20	Substance not classified as hazardous
Kaolin, calcined	(CAS-No.) 92704-41-1 (EC-No.) 296-473-8	1 - 20	Substance not classified as hazardous
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 GB 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

Substance

Carbon monoxide Carbon dioxide. Hydrogen Chloride Oxides of nitrogen.

5.3. Advice for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. 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.

<u>Condition</u> During combustion.

During combustion. During combustion. During combustion.

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

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

. Information on dasic physical and chem
Physical state
Specific Physical Form:
Colour
Odor
Odour threshold
Melting point/freezing point
Boiling point/boiling range
Flammability (solid, gas)
Flammable Limits(LEL)
Flammable Limits(UEL)
Flash point
Autoignition temperature
Decomposition temperature
рН
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

Liquid. Paste White Acrylate No data available. Not applicable. >=37.8 °C Not applicable. No data available. 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 mm²/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

Substance None known. **Condition**

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

11.1. Information on hazard classes as defined in the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.

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

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	LD50 estimated to be 2,000 - 5,000 mg/kg
		hazards	

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 (polymer)	Ingestion	Rat	LD50 > 35,000 mg/kg
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	29 days
				mg/kg/day	
Tetrahydrofurfuryl methacrylate	Ingestion	Toxic to female reproduction	Rat	NOAEL 120	premating
				mg/kg/day	into lactation
Tetrahydrofurfuryl methacrylate	Ingestion	Toxic to development	Rat	NOAEL 120	premating
				mg/kg/day	into lactation
2-hydroxyethyl methacrylate	Ingestion	Not classified for female reproduction	Rat	NOAEL	premating &
				1,000	during

				mg/kg/day	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 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
Exo-1,7,7- trimethylbicyclo[2. 2.1]hept-2-yl methacrylate	7534-94-3	Water flea	Experimental	48 hours	EC50	1.1 mg/l
Exo-1,7,7- trimethylbicyclo[2. 2.1]hept-2-yl methacrylate	7534-94-3	Zebra Fish	Experimental	96 hours	LC50	1.8 mg/l
Exo-1,7,7- trimethylbicyclo[2. 2.1]hept-2-yl methacrylate	7534-94-3	Green algae	Experimental	72 hours	EC10	0.751 mg/l
Exo-1,7,7- trimethylbicyclo[2. 2.1]hept-2-yl methacrylate	7534-94-3	Water flea	Experimental	21 days	NOEC	0.233 mg/l
Bisphenol A polyethylene glycol diether dimethacrylate (polymer)	41637-38-1	Activated sludge	Estimated	3 hours	EC50	>1,000 mg/l
Bisphenol A polyethylene glycol diether dimethacrylate (polymer)	41637-38-1	Green algae	Estimated	72 hours	EL50	>100 mg/l
Bisphenol A polyethylene glycol diether dimethacrylate (polymer)	41637-38-1	Water flea	Estimated	48 hours	EL50	>100 mg/l
Bisphenol A polyethylene glycol diether dimethacrylate (polymer)	41637-38-1	Zebra Fish	Estimated	96 hours	LL50	>100 mg/l
naphthenic acids, copper salts	1338-02-9	Green algae	Estimated	72 hours	ErC50	0.629 mg/l
naphthenic acids, copper salts	1338-02-9	Water flea	Estimated	48 hours	EC50	0.0756 mg/l
naphthenic acids, copper salts	1338-02-9	Zebra Fish	Estimated	96 hours	LC50	0.07 mg/l
naphthenic acids, copper salts	1338-02-9	Fathead minnow	Estimated	32 days	EC10	0.0354 mg/l
naphthenic acids,	1338-02-9	Green algae	Estimated	N/A	NOEC	0.132 mg/l
copper salts naphthenic acids,	1338-02-9	Sediment Worm	Estimated	28 days	NOEC	110 mg/kg (Dry Weight)
copper salts naphthenic acids,	1338-02-9	Water flea	Estimated	7 days	NOEC	0.02 mg/l
copper salts naphthenic acids, copper salts	1338-02-9	Activated sludge	Estimated	N/A	EC50	42 mg/l

naphthenic acids, copper salts	1338-02-9	Barley	Estimated	4 days	NOEC	96 mg/kg (Dry Weight)
naphthenic acids, copper salts	1338-02-9	Redworm	Estimated	56 days	NOEC	60 mg/kg (Dry Weight)
naphthenic acids, copper salts	1338-02-9	Soil microbes	Estimated	4 days	NOEC	72 mg/kg (Dry Weight)
naphthenic acids, copper salts	1338-02-9	Springtail	Estimated	28 days	NOEC	167 mg/kg (Dry Weight)
benzyltributylamm onium chloride	23616-79-7	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Poly[oxy(methyl- 1,2- ethanediyl)], .a(2- methyl-1-oxo-2- propenyl)w (phosphonooxy)-	95175-93-2	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
tetrahydro-2-furyl- methanol	97-99-4	Green algae	Experimental	72 hours	EC50	>100 mg/l
tetrahydro-2-furyl- methanol	97-99-4	Medaka	Experimental	96 hours	LC50	>100 mg/l
tetrahydro-2-furyl- methanol	97-99-4	Water flea	Experimental	48 hours	EC50	>100 mg/l
tetrahydro-2-furyl- methanol	97-99-4	Green algae	Experimental	72 hours	NOEC	>100 mg/l
tetrahydro-2-furyl- methanol	97-99-4	Water flea	Experimental	21 days	NOEC	>100 mg/l

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/ThOD (< 10 day window)	OECD 301F - Manometric respirometry
2-hydroxyethyl methacrylate	868-77-9	Experimental Biodegradation	28 days	BOD	84 %BOD/COD	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/THCO2 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
benzyltributylamm onium chloride	23616-79-7	Estimated Biodegradation	28 days	BOD	3.9 %BOD/ThOD	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/ThOD	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
benzyltributylamm onium chloride	23616-79-7	Estimated Bioconcentration		Bioaccumulation factor	31.7	
Poly[oxy(methyl- 1,2- ethanediyl)], .a(2- methyl-1-oxo-2- propenyl)w (phosphonooxy)-	95175-93-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
	97-99-4	Experimental Bioconcentration		Log Kow	-0.11	OECD 107 log Kow shke flsk mtd

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
Tetrahydrofurfuryl methacrylate	2455-24-5	Modeled Mobility in Soil	Koc	25 l/kg	Episuite™
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	Кос	5,130 l/kg	OECD 121 Estim. of Koc by HPLC
tetrahydro-2-furyl- methanol	97-99-4	Modeled Mobility in Soil	Кос	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. Other adverse effects

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

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.

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN 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 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code	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 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 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.

COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1 None

Seveso named dangerous substances, Annex 1, Part 2

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

Regulation (EU) No 649/2012, as amended for GB

No chemicals listed

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended for GB.

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:

GB Section 02: CLP Ingredient table information was modified.

GB Section 04: First Aid - Symptoms and Effects (GB CLP) information was added. GB Section 04: Information on toxicological effects information was modified. Section 2: <125ml Hazard - Health information was modified. Section 2: <125ml Precautionary - Prevention information was modified. Section 2: <125ml Precautionary - Response information was modified. Label: CLP Classification information was modified. Label: CLP Precautionary - Prevention information was modified. Label: CLP Precautionary - Response information was modified. Section 02: Label Elements: GB Percent Unknown information was modified. Label: Graphic information was modified. Section 3: Composition/ Information of ingredients table information was modified. Section 4: First aid for eye contact information information was modified. Section 8: Eve/face protection information information was modified. Section 8: Personal Protection - Skin/body information 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.

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

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