Safety Data Sheet

Document group:	34-3734-0	**Version number:**	5.00
Issue Date:	16/06/2023	**Supersedes date:**	05/10/2022

This Safety Data Sheet has been prepared in accordance with the South African National Standard SANS 10234:2008.

IDENTIFICATION

1.1. Product identifier
3M(TM) Scotch-Weld(TM) Low Odor Acrylic Adhesive DP8810NS Green

Product Identification Numbers
62-2854-3631-7

1.2. Recommended use and restrictions on use
Adhesive

1.3. Supplier's details

Address:	3M South Africa (Pty) Ltd, Private Bag X926, Rivonia 2128
Telephone:	011 806 2000
E Mail:	Not available.
Website:	www.3m.co.za

1.4. Emergency telephone number
011 806 2000

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:

34-3732-4, 34-3730-8

TRANSPORT INFORMATION

Compliance is required to South African Transport Information Road Traffic Act & Regulations and Railroad regulations, IATA Standards for airfreight and Maritime standards for ocean freight.

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.

3M South Africa SDSs are available at www.3m.co.za

Safety Data Sheet

Document group:	34-3732-4	**Version number:**	5.03
Issue Date:	13/11/2019	**Supersedes date:**	11/10/2018

This Safety Data Sheet has been prepared in accordance with the South African National Standard SANS 10234:2008.

SECTION 1: Identification

1.1. Product identifier
3M(TM) Scotch-Weld(TM) Low Odor Acrylic Adhesive DP8810NS Green, Part A

1.2. Recommended use and restrictions on use

Recommended use
Adhesive

1.3. Supplier's details

Address:	3M South Africa (Pty) Ltd, Private Bag X926, Rivonia 2128
Telephone:	011 806 2000
E Mail:	Not available.
Website:	www.3m.co.za

1.4. Emergency telephone number
011 806 2000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture
Acute Toxicity (oral): Category 5.
Skin Sensitizer: Category 1.
Acute Aquatic Toxicity: Category 2.
Chronic Aquatic Toxicity: Category 3.

2.2. Label elements

Signal word
WARNING!

Symbols
Exclamation mark |

Pictograms

HAZARD STATEMENTS:

H303	May be harmful if swallowed.
H317	May cause an allergic skin reaction.
H401	Toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P280E	Wear protective gloves.

Response:

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

Disposal:

P501	Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

2.3. Other hazards
None known.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Wt
Oxydipropyl dibenzoate	27138-31-4	50 - 80
Styrene, polymer with 1,3-utadiene, butylacrylate and mehyl methacrylate	25101-28-4	5 - 30
Catalyst (NJTS Reg. No. 04499600-6922)	Trade Secret	1 - 20
Tert-butyl 3,5,5-trimethylperoxyhexanoate	13122-18-4	1 - 10

SECTION 4: First aid measures

4.1. Description of first aid measures

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

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

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

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

4.2. Most important symptoms and effects, both acute and delayed
See Section 11.1 Information on toxicological effects

4.3. Indication of any immediate medical attention and special treatment required
Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable 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	Condition
Hydrocarbons.	During combustion.
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.

5.3. Special protective actions 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 vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions
Avoid release to the environment.

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

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.

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.

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:
Safety glasses with side shields.

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: 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.

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	Hydrocarbon
Odour threshold	*No data available.*

pH	*Not applicable.*
Melting point/Freezing point	*Not applicable.*
Boiling point/Initial boiling point/Boiling range	> 93,3 ºC
Flash point	> 93,3 ºC [*Test Method:*Closed Cup]
Evaporation rate	*No data available.*
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	*No data available.*
Flammable Limits(UEL)	*No data available.*
Vapour pressure	*No data available.*
Vapour density	*No data available.*
Density	1,08 g/ml
Relative density	1,08 [*Ref Std:*WATER=1]
Water solubility	Nil
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Autoignition temperature	*No data available.*
Decomposition temperature	*No data available.*
Viscosity	20 000 mPa-s
Molecular weight	*Not applicable.*
Percent volatile	*No data available.*
VOC less H2O & exempt solvents	4,8 g/l [*Details:*when used as intended with Part B]
VOC less H2O & exempt solvents	0,5 % [*Details:*when used as intended with Part B]
VOC less H2O & exempt solvents	59,4 g/l [*Details:*as supplied]

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	Condition
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation
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 ATE2 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-utadiene, butylacrylate and mehyl methacrylate	Dermal		LD50 estimated to be > 5 000 mg/kg
Styrene, polymer with 1,3-utadiene, butylacrylate and mehyl methacrylate	Ingestion	Rat	LD50 > 5 000 mg/kg
Catalyst (NJTS Reg. No. 04499600-6922)	Dermal	Professional judgement	LD50 estimated to be 2 000 - 5 000 mg/kg
Catalyst (NJTS Reg. No. 04499600-6922)	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 pig	Not classified
Catalyst (NJTS Reg. No. 04499600-6922)	Mouse	Not classified
Tert-butyl 3,5,5-trimethylperoxyhexanoate	Guinea pig	Sensitising

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
Oxydipropyl dibenzoate	In Vitro	Not mutagenic
Catalyst (NJTS Reg. No. 04499600-6922)	In Vitro	Not mutagenic

Carcinogenicity

For the component/components, either no data are currently available or the data are 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 mg/kg/day	2 generation
Oxydipropyl dibenzoate	Ingestion	Not classified for male reproduction	Rat	NOAEL 400 mg/kg/day	2 generation
Oxydipropyl dibenzoate	Ingestion	Not classified for development	Rat	NOAEL 1 000 mg/kg/day	during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Catalyst (NJTS Reg. No. 04499600-6922)	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 are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information

on this material and/or its components.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:
GHS Acute 2: Toxic to aquatic life.

Chronic aquatic hazard:
GHS Chronic 3: Harmful to aquatic life with long lasting effects.

No product test data available.

Material	CAS Nbr	Organism	Type	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	Water flea	Experimental	48 hours	Effect Level 50%	19,31 mg/l
Oxydipropyl dibenzoate	27138-31-4	Green Algae	Experimental	72 hours	Effect Level 50%	4,9 mg/l
Oxydipropyl dibenzoate	27138-31-4	Green Algae	Experimental	72 hours	Effect Concentration 10%	0,89 mg/l
Styrene, polymer with 1,3-utadiene, butylacrylate and mehyl methacrylate	25101-28-4		Data not available or insufficient for classification			
Catalyst (NJTS Reg. No. 04499600-6922)	Trade Secret		Data not available or insufficient for classification			
Tert-butyl 3,5,5-trimethylperoxyhexanoate	13122-18-4	Green Algae	Experimental		EC50	0,51 mg/l
Tert-butyl 3,5,5-trimethylperoxyhexanoate	13122-18-4	Rainbow trout	Experimental		LC50	7 mg/l
Tert-butyl 3,5,5-trimethylperoxyhexanoate	13122-18-4	Water flea	Experimental		EC50	>100 mg/l
Tert-butyl 3,5,5-trimethylperox	13122-18-4	Green Algae	Experimental		NOEC	0,125 mg/l

yhexanoate						

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Oxydipropyl dibenzoate	27138-31-4	Experimental Biodegradation	28 days	CO2 evolution	85 % weight	OECD 301B - Modified sturm or CO2
Styrene, polymer with 1,3-utadiene, butylacrylate and mehyl methacrylate	25101-28-4	Data not availbl-insufficient			N/A	
Catalyst (NJTS Reg. No. 04499600-6922)	Trade Secret	Estimated Photolysis		Photolytic half-life (in air)	1.48 days (t 1/2)	Other methods
Catalyst (NJTS Reg. No. 04499600-6922)	Trade Secret	Experimental Biodegradation	28 days	CO2 evolution	29.1 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
Tert-butyl 3,5,5-trimethylperoxyhexanoate	13122-18-4	Estimated Biodegradation	28	BOD	14 % BOD/ThBOD	OECD 301C - MITI test (I)

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Oxydipropyl dibenzoate	27138-31-4	Estimated Bioconcentration		Bioaccumulation factor	8	Estimated: Bioconcentration factor
Styrene, polymer with 1,3-utadiene, butylacrylate and mehyl methacrylate	25101-28-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Catalyst (NJTS Reg. No. 04499600-6922)	Trade Secret	Experimental Bioconcentration		Log Kow	2.57	Other methods
Tert-butyl 3,5,5-trimethylperoxyhexanoate	13122-18-4	Estimated Bioconcentration		Bioaccumulation factor	363	Estimated: Bioconcentration factor

12.4. Mobility in soil
Please contact manufacturer for more details

12.5 Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods
Product must only be disposed of by an authorized/permitted waste disposal contractor or incinerated in an industrial or commercial facility in the presence of a combustible material.

SECTION 14: Transport Information

Compliance is required to South African Transport Information Road Traffic Act & Regulations and Railroad regulations, IATA Standards for airfreight and Maritime standards for ocean freight.

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.

SECTION 16: Other information

Revision information:
Section 09: Boiling point/Initial boiling point/Boiling range information was modified.
Section 09: Color information was added.
Section 09: Odor information was added.
Sections 3 and 9: Odour, colour, grade information information was deleted.
Section 12: Component ecotoxicity information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information information was modified.
Sectio 16: UK disclaimer information was deleted.

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

3M South Africa SDSs are available at www.3m.co.za

Safety Data Sheet

Document group:	34-3730-8	**Version number:**	5.00
Issue Date:	16/06/2023	**Supersedes date:**	03/09/2019

This Safety Data Sheet has been prepared in accordance with the South African National Standard SANS 10234:2008.

SECTION 1: Identification

1.1. Product identifier
3M™ Scotch-Weld™ Low Odor Acrylic Adhesive DP8810NS Green and Low Odor Acrylic Adhesive 8810NS Green, Part B

1.2. Recommended use and restrictions on use

Recommended use
Adhesive, Activator for 2-part acrylic adhesive

NPEL priemerná (respirabilná frakcia)(8 hodín): 1 mg/m3; NPEL krátkodobá (respirabilná frakcia) (15 minút): 4 mg/m3

1.3. Supplier's details
Address: 3M South Africa (Pty) Ltd, Private Bag X926, Rivonia 2128
Telephone: 011 806 2000
E Mail: Not available.
Website: www.3m.co.za

1.4. Emergency telephone number
011 806 2000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture
Skin Corrosion/Irritation: Category 3.
Serious Eye Damage/Irritation: Category 2A
Skin Sensitizer: Category 1.
Reproductive Toxicity: Category 1B.
Acute Aquatic Toxicity: Category 3.
Chronic Aquatic Toxicity: Category 3.

2.2. Label elements

Signal word
Danger

Symbols
Exclamation mark |Health Hazard |

Pictograms

HAZARD STATEMENTS:

H316	Causes mild skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H360	May damage fertility or the unborn child.
H412	Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P201	Obtain special instructions before use.
P280K	Wear protective gloves 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.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Wt
Tetrahydrofurfuryl methacrylate	2455-24-5	25 - 45
2-hydroxyethyl methacrylate	868-77-9	15 - 20
Butadiene-Acrylonitrile Polymer	9003-18-3	5 - 20
Isobornyl Methacrylate	7534-94-3	5 - 20
Kaolin	1332-58-7	1 - 10
Bisphenol A polyethylene glycol diether dimethacrylate (polymer)	41637-38-1	1 - 10
Poly[oxy(methyl-1,2-ethanediyl)], .a.-(2-methyl-1-oxo-2-propenyl)-.w.-(phosphonooxy)-	95175-93-2	< 3
TETRAHYDROFURFURYL ALCOHOL	97-99-4	< 0.3
Naphthenic acids, copper salts	1338-02-9	< 0.1

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. Remove contact lenses if easy to do. Continue rinsing. 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

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. Suitable 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	Condition
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.
Oxides of nitrogen.	During combustion.

5.3. Special protective actions 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 vapors, 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 in accordance with applicable local/regional/national/international regulations.

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.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

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

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Silicon Carbide	1332-58-7	South Africa RELs	TWA(as total dust)(8 hours):10 mg/m3;TWA(as respirable dust)(8 hours):5 mg/m3	
Kaolin	1332-58-7	ACGIH	TWA(respirable fraction):2 mg/m3	A4: Not class. as human carcin
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	1332-58-7	South Africa RELs	TWA(respirable fraction)(8 hours):5 mg/m3	
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles	1332-58-7	South Africa RELs	TWA(8 hours):10 mg/m3	
COPPER COMPOUNDS	1338-02-9	ACGIH	TWA(as Cu, fume):0.2 mg/m3;TWA(as Cu dust or mist):1 mg/m3	
COPPER COMPOUNDS	1338-02-9	South Africa RELs	TWA(as Cu, fume)(8 hours):0.4 mg/m3;TWA(as Cu dust or mist)(8 hours):2 mg/m3	
TETRAHYDROFURFURYL ALCOHOL	97-99-4	AIHA	TWA:2 mg/m3(0.5 ppm)	SKIN

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
CMRG : Chemical Manufacturer's Recommended Guidelines
South Africa CLs : South Africa. Control Limits. Regulations for Hazardous Chemical Substances, Table 1
South Africa RELs : South Africa. Recommended Exposure Limits (RELs) Regulations for Hazardous Chemical Substances, Table 2
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

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:
Safety glasses with side shields.
Indirect vented goggles.

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: Polymer laminate

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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Paste
Colour	White
Odor	Acrylate
Odour threshold	*No data available.*
pH	*Not applicable.*
Melting point/Freezing point	*Not applicable.*
Boiling point/Initial boiling point/Boiling range	>=37,8 ºC
Flash point	> 93,3 ºC [*Test Method:*Closed Cup]
Evaporation rate	*No data available.*
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	*No data available.*
Flammable Limits(UEL)	*No data available.*
Vapour pressure	*No data available.*
Vapor Density and/or Relative Vapor Density	*No data available.*
Density	1,13 g/ml
Relative density	1,13 [*Ref Std:*WATER=1]
Water solubility	Nil
Solubility- non-water	*No data available.*

Partition coefficient: n-octanol/water	*No data available.*
Autoignition temperature	*No data available.*
Decomposition temperature	*No data available.*
Viscosity/Kinematic Viscosity	100 000 - 125 000 mPa-s
Volatile organic compounds (VOC)	*No data available.*
Percent volatile	*No data available.*
VOC less H2O & exempt solvents	4,8 g/l [*Details:*when used as intended with Part A]
VOC less H2O & exempt solvents	612 g/l [*Details:*as suuplied]
VOC less H2O & exempt solvents	0,5 % [*Details:*when used as intended with Part A]
Molecular weight	*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	**Condition**
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation
Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose

and throat pain. May cause additional health effects (see below).

Skin contact
Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching. May cause additional health effects (see below).

Eye contact
Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired 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 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
Butadiene-Acrylonitrile Polymer	Dermal	Rabbit	LD50 > 15 000 mg/kg
Butadiene-Acrylonitrile Polymer	Ingestion	Rat	LD50 > 30 000 mg/kg
Isobornyl Methacrylate	Dermal	Rabbit	LD50 > 3 000 mg/kg
Isobornyl Methacrylate	Ingestion	Rat	LD50 3 100 mg/kg
Kaolin	Dermal		LD50 estimated to be > 5 000 mg/kg
Kaolin	Ingestion	Human	LD50 > 15 000 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
TETRAHYDROFURFURYL ALCOHOL	Dermal	Professional judgement	LD50 estimated to be 2 000 - 5 000 mg/kg
TETRAHYDROFURFURYL ALCOHOL	Inhalation-Vapor (4 hours)	Rat	LC50 > 3,1 mg/l
TETRAHYDROFURFURYL ALCOHOL	Ingestion	Rat	LD50 > 2 000 mg/kg
Naphthenic acids, copper salts	Dermal	similar compounds	LD50 > 2 000 mg/kg
Naphthenic acids, copper salts	Ingestion	similar	LD50 >300, < 2,000 mg/kg

		compoun ds	

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Tetrahydrofurfuryl methacrylate	Rabbit	No significant irritation
2-hydroxyethyl methacrylate	Rabbit	Minimal irritation
Butadiene-Acrylonitrile Polymer	Professio nal judgemen t	No significant irritation
Isobornyl Methacrylate	Rabbit	Mild irritant
Kaolin	Professio nal judgemen t	No significant irritation
Bisphenol A polyethylene glycol diether dimethacrylate (polymer)	Rabbit	Minimal irritation
Poly[oxy(methyl-1,2-ethanediyl)], .a.-(2-methyl-1-oxo-2-propenyl)-.w.-(phosphonooxy)-	Not available	Irritant
TETRAHYDROFURFURYL ALCOHOL	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
Butadiene-Acrylonitrile Polymer	Professio nal judgemen t	No significant irritation
Isobornyl Methacrylate	Rabbit	Mild irritant
Kaolin	Professio nal judgemen t	No significant irritation
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.-(phosphonooxy)-	Not available	Corrosive
TETRAHYDROFURFURYL ALCOHOL	Rabbit	Severe irritant
Naphthenic acids, copper salts	In vitro data	No significant irritation

Sensitization:

Skin Sensitisation

Name	Species	Value
Tetrahydrofurfuryl methacrylate	In vitro data	Sensitising
2-hydroxyethyl methacrylate	Human and animal	Sensitising
Isobornyl Methacrylate	Guinea pig	Not classified
Bisphenol A polyethylene glycol diether dimethacrylate (polymer)	Guinea pig	Not classified
TETRAHYDROFURFURYL ALCOHOL	Mouse	Not classified
Naphthenic acids, copper salts	Guinea pig	Not classified

Respiratory Sensitisation

For the component/components, either no data are currently available or the data are 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
Isobornyl Methacrylate	In Vitro	Not mutagenic
Bisphenol A polyethylene glycol diether dimethacrylate (polymer)	In Vitro	Not mutagenic
TETRAHYDROFURFURYL ALCOHOL	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Kaolin	Inhalation	Multiple animal species	Not carcinogenic

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
Isobornyl Methacrylate	Ingestion	Not classified for female reproduction	Rat	NOAEL 500 mg/kg/day	premating into lactation
Isobornyl Methacrylate	Ingestion	Not classified for male reproduction	Rat	NOAEL 500 mg/kg/day	4 weeks
Isobornyl Methacrylate	Ingestion	Not classified for development	Rat	NOAEL 500 mg/kg/day	premating into lactation
TETRAHYDROFURFURYL ALCOHOL	Ingestion	Toxic to female reproduction	Rat	NOAEL 50 mg/kg/day	premating into lactation
TETRAHYDROFURFURYL ALCOHOL	Dermal	Toxic to male reproduction	Rat	NOAEL 100 mg/kg/day	13 weeks
TETRAHYDROFURFURYL ALCOHOL	Ingestion	Toxic to male reproduction	Rat	NOAEL 150 mg/kg/day	47 days
TETRAHYDROFURFURYL ALCOHOL	Inhalation	Toxic to male reproduction	Rat	NOAEL 0,6 mg/l	90 days
TETRAHYDROFURFURYL ALCOHOL	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
Isobornyl 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	
TETRAHYDROFURFURYL ALCOHOL	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
Isobornyl Methacrylate	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 150 mg/kg/day	90 days
Isobornyl Methacrylate	Ingestion	endocrine system | hematopoietic system | kidney and/or bladder	Not classified	Rat	NOAEL 500 mg/kg/day	90 days
Kaolin	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL NA	occupational exposure
Kaolin	Inhalation	pulmonary fibrosis	Not classified	Rat	NOAEL Not available	
TETRAHYDROFURFURYL ALCOHOL	Inhalation	nervous system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0,2 mg/l	90 days
TETRAHYDROFURFURYL ALCOHOL	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0,6 mg/l	90 days
TETRAHYDROFURFURYL ALCOHOL	Inhalation	eyes	Not classified	Rat	NOAEL 2,1 mg/l	90 days
TETRAHYDROFURFURYL ALCOHOL	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 69 mg/kg/day	91 days
TETRAHYDROFURFURYL ALCOHOL	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 150 mg/kg/day	28 days
TETRAHYDROFURFURYL ALCOHOL	Ingestion	endocrine system | kidney and/or bladder	Not classified	Rat	NOAEL 600 mg/kg/day	28 days
TETRAHYDROFURFURYL ALCOHOL	Ingestion	liver | eyes	Not classified	Rat	NOAEL 781 mg/kg/day	91 days
TETRAHYDROFURFURYL ALCOHOL	Ingestion	heart | nervous system	Not classified	Rat	NOAEL 600 mg/kg/day	28 days

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

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

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:

GHS Acute 3: Harmful to aquatic life.

Chronic aquatic hazard:
GHS Chronic 3: Harmful to aquatic life with long lasting effects.

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Tetrahydrofurfuryl methacrylate	2455-24-5	Fathead minnow	Experimental	96 hours	LC50	34,7 mg/l
Tetrahydrofurfuryl methacrylate	2455-24-5	Green algae	Experimental	72 hours	ErC50	>100 mg/l
Tetrahydrofurfuryl methacrylate	2455-24-5	Green algae	Experimental	72 hours	ErC10	100 mg/l
Tetrahydrofurfuryl methacrylate	2455-24-5	Water flea	Experimental	21 days	NOEC	37,2 mg/l
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
Butadiene-Acrylonitrile Polymer	9003-18-3	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Isobornyl Methacrylate	7534-94-3	Green algae	Experimental	72 hours	EC50	2,3 mg/l
Isobornyl Methacrylate	7534-94-3	Water flea	Experimental	48 hours	EC50	1,1 mg/l
Isobornyl Methacrylate	7534-94-3	Zebra Fish	Experimental	96 hours	LC50	1,8 mg/l
Isobornyl Methacrylate	7534-94-3	Green algae	Experimental	72 hours	EC10	0,751 mg/l
Isobornyl 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
Kaolin	1332-58-7	Water flea	Experimental	48 hours	LC50	>1 100 mg/l

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
TETRAHYDROFURFURYL ALCOHOL	97-99-4	Green algae	Experimental	72 hours	EC50	>100 mg/l
TETRAHYDROFURFURYL ALCOHOL	97-99-4	Medaka	Experimental	96 hours	LC50	>100 mg/l
TETRAHYDROFURFURYL ALCOHOL	97-99-4	Water flea	Experimental	48 hours	EC50	>100 mg/l
TETRAHYDROFURFURYL ALCOHOL	97-99-4	Green algae	Experimental	72 hours	NOEC	>100 mg/l
TETRAHYDROFURFURYL ALCOHOL	97-99-4	Water flea	Experimental	21 days	NOEC	>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, copper salts	1338-02-9	Green algae	Estimated	N/A	NOEC	0,132 mg/l
Naphthenic acids, copper salts	1338-02-9	Sediment Worm	Estimated	28 days	NOEC	110 mg/kg (Dry Weight)
Naphthenic acids, copper salts	1338-02-9	Water flea	Estimated	7 days	NOEC	0,02 mg/l
Naphthenic acids, copper salts	1338-02-9	Activated sludge	Estimated	N/A	EC50	42 mg/l
Naphthenic acids, copper salts	1338-02-9	Barley	Estimated	4 days	NOEC	96 mg/kg (Dry Weight)
Naphthenic acids, copper salts	1338-02-9	Redworm	Estimated	56 days	NOEC	60 mg/kg (Dry Weight)
Naphthenic acids, copper salts	1338-02-9	Soil microbes	Estimated	4 days	NOEC	72 mg/kg (Dry Weight)
Naphthenic acids, copper salts	1338-02-9	Springtail	Estimated	28 days	NOEC	167 mg/kg (Dry Weight)

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
Butadiene-Acrylonitrile Polymer	9003-18-3	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Isobornyl Methacrylate	7534-94-3	Experimental Biodegradation	28 days	CO2 evolution	70 %CO2 evolution/THCO2 evolution	OECD 310 CO2 Headspace
Bisphenol A polyethylene glycol	41637-38-1	Experimental Biodegradation	28 days	Percent degraded	24 %degraded	

diether dimethacrylate (polymer)						
Kaolin	1332-58-7	Data not availbl-insufficient	N/A	N/A	N/A	N/A
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
TETRAHYDROFURFURYL ALCOHOL	97-99-4	Experimental Biodegradation	28 days	BOD	92 %BOD/ThOD	OECD 301C - MITI test (I)
TETRAHYDROFURFURYL ALCOHOL	97-99-4	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	>1 years (t 1/2)	OECD 111 Hydrolysis func of pH
Naphthenic acids, copper salts	1338-02-9	Data not availbl-insufficient	N/A	N/A	N/A	N/A

12.3 : Bioaccumulative potential

Material	CAS Nbr	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
Butadiene-Acrylonitrile Polymer	9003-18-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Isobornyl Methacrylate	7534-94-3	Modeled Bioconcentration		Bioaccumulation factor	39	Catalogic™
Isobornyl 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	
Kaolin	1332-58-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
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
TETRAHYDROFURFURYL ALCOHOL	97-99-4	Experimental Bioconcentration		Log Kow	-0.11	OECD 107 log Kow shke flsk mtd
Naphthenic acids, copper salts	1338-02-9	Analogous Compound BCF - Fish	42 days	Bioaccumulation factor	≤27	OECD305-Bioconcentration

12.4. Mobility in soil
Please contact manufacturer for more details

12.5 Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product must only be disposed of by an authorized/permitted waste disposal contractor or incinerated in an industrial or commercial facility in the presence of a combustible material.

SECTION 14: Transport Information

Compliance is required to South African Transport Information Road Traffic Act & Regulations and Railroad regulations, IATA Standards for airfreight and Maritime standards for ocean freight.

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.

SECTION 16: Other information

Revision information:
Section 1: Product name information was modified.
US Section 01 Product Use - Recommended Use information was modified.
Label: GHS Classification information was modified.
Label: GHS Precautionary - Disposal information was deleted.
Label: GHS Precautionary - Prevention information was modified.
Label: GHS Precautionary - Response information was modified.
Label: Graphic information was modified.
Label: Signal Word information was modified.
Label: Symbol information was modified.
Section 2: Ingredient table information was modified.
Section 04: First Aid - Symptoms and Effects (GHS) information was added.
Section 04: Information on toxicological effects information was deleted.
Section 5: Hazardous combustion products table information was modified.
Section 8: Eye/face protection information information was modified.
Section 8: Occupational exposure limit table information was modified.
Section 8: Personal Protection - Skin/body information information was added.
Section 08: Skin protection - incidental contact text information was deleted.
Section 08: Skin protection - incidental contact information was deleted.
Section 8: Skin protection - protective clothing information information was added.
Section 09: Percent Volatile information was added.
Section 9: Property description for optional properties information was added.
Section 9: Property description for optional properties information was deleted.
Section 09: Vapor Density Value information was added.
Section 9: Vapour density value information was deleted.
Section 9: Viscosity information information was deleted.
Section 09: Viscosity information was added.
Section 09: VOC Less H2O & Exempt Solvents information was added.
Section 09: Volatile Organic Compounds information was added.
Section 11: Acute Toxicity table information was modified.
Section 11: Carcinogenicity Table information was modified.
Section 11: Germ Cell Mutagenicity Table information was modified.

Section 11: Reproductive Toxicity Table information was modified.
Section 11: Serious Eye Damage/Irritation Table information was modified.
Section 11: Skin Corrosion/Irritation Table information was modified.
Section 11: Skin Sensitization Table information was modified.
Section 11: Target Organs - Repeated Table information was modified.
Section 11: Target Organs - Single Table information was modified.
Section 12: Component ecotoxicity information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information information was modified.
Sectio 16: UK disclaimer information was deleted.

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