Safety Data Sheet

Document Group:	31-5485-3	**Version Number:**	3.00
Issue Date:	13/05/2021	**Supercedes Date:**	26/02/2019

This Safety Data Sheet has been prepared in accordance with the Malaysia Occupational Safety and Health (Chemical Classification, Labelling and Safety Data Sheets) Regulations 2013.

IDENTIFICATION

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

1.2. Recommended use and restrictions on use

Recommended use
Adhesive

1.3. Supplier's details

ADDRESS: 3M Malaysia Sdn. Bhd., Level 8, Block F, Oasis Square, No.2, Jalan PJU 1A/7A, Ara Damansara 47301 Petaling, Jaya, Selangor
Telephone: 03-7884 2888
E Mail: 3mmyehsr@mmm.com
Website: www.3M.com.my

1.4. Emergency telephone number
+60 03-7884 2888

This product is a kit or a multipart product which consists of multiple, independently packaged components. An SDS for each of these components is included. Please do not separate the component SDSs from this cover page. The document numbers of the SDSs for components of this product are:

31-5476-2, 31-5472-1

TRANSPORT INFORMATION

This product is a kit that consists of two or more different regulated materials packed in the same outer packaging (ship unit). The transportation classifications of the individual components appear in Section 14 of the attached SDSs.
Transportation classifications are provided as a customer service. As for shipping, YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling or marking requirements. The above information is only for reference. If you are shipping by air or ocean, YOU are advised to check & meet applicable regulatory requirements.

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 Malaysia SDSs are available at www.3M.com.my

Safety Data Sheet

Document Group:	31-5472-1	**Version Number:**	3.00
Issue Date:	18/11/2019	**Supercedes Date:**	26/02/2019

This Safety Data Sheet has been prepared in accordance with the Malaysia Occupational Safety and Health (Chemical Classification, Labelling and Safety Data Sheets) Regulations 2013.

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 Malaysia Sdn. Bhd., Level 8, Block F, Oasis Square, No.2, Jalan PJU 1A/7A, Ara Damansara 47301 Petaling, Jaya, Selangor
Telephone: 03-7884 2888
E Mail: 3mmyehsr@mmm.com
Website: www.3M.com.my

1.4. Emergency telephone number
+60 03-7884 2888

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture
Skin Sensitizer: Category 1.
Chronic Aquatic Toxicity: Category 3.

2.2. Label elements
Signal word
Warning

Symbols
Exclamation mark |

Pictograms

Hazard Statements

H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

General:

P102	Keep out of reach of children.
P101	If medical advice is needed, have product container or label at hand.

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	C.A.S. No.	% by Wt
Dibenzoate Propanol	27138-31-4	45 - 65
Acrylate Polymer	25101-28-4	10 - 30
Catalyst (NJTS Reg. No. 04499600-6922)	Trade Secret	1 - 15
Organic Peroxide	13122-18-4	0.1 - 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
Part of the oxygen for combustion is supplied by the peroxide itself.

Hazardous Decomposition or By-Products

Substance	Condition
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. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up
Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. 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
Avoid breathing dust/fume/gas/mist/vapors/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 oxidizing agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities
Keep cool. Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidizing 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 SDS.

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/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection
None required.

Skin/hand protection
Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. 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 vapors 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
Color	Blue
Odor	Ester
Odor threshold	*No Data Available*
pH	*Not Applicable*

Melting point/Freezing point	*Not Applicable*
Boiling point/Initial boiling point/Boiling range	>=65.6 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*
Vapor Pressure	*No Data Available*
Vapor 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 - 25,000 mPa-s
Molecular weight	*No Data Available*
VOC Less H2O & Exempt Solvents	2.8 g/l [*Details:*when used as intended with Part B.]

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 polymerization will not occur.

10.4. Conditions to avoid
Heat
Sparks and/or flames

10.5. Incompatible materials
Amines
Strong acids
Strong bases
Strong oxidizing 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 labeling, 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.

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
Dibenzoate Propanol	Dermal	Rat	LD50 > 2,000 mg/kg
Dibenzoate Propanol	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 200 mg/l
Dibenzoate Propanol	Ingestion	Rat	LD50 3,295 mg/kg
Acrylate Polymer	Dermal		LD50 estimated to be > 5,000 mg/kg
Acrylate Polymer	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
Organic Peroxide	Dermal	Rat	LD50 > 2,000 mg/kg
Organic Peroxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.8 mg/l
Organic Peroxide	Ingestion	Rat	LD50 12,905 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Dibenzoate Propanol	Rabbit	No significant irritation
Organic Peroxide	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Dibenzoate Propanol	Rabbit	No significant irritation

Organic Peroxide	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
Dibenzoate Propanol	Guinea pig	Not classified
Catalyst (NJTS Reg. No. 04499600-6922)	Mouse	Not classified
Organic Peroxide	Guinea pig	Sensitizing

Respiratory Sensitization

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

Germ Cell Mutagenicity

Name	Route	Value
Dibenzoate Propanol	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
Dibenzoate Propanol	Ingestion	Not classified for female reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
Dibenzoate Propanol	Ingestion	Not classified for male reproduction	Rat	NOAEL 400 mg/kg/day	2 generation
Dibenzoate Propanol	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
Dibenzoate Propanol	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 labeling, 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 #	Organism	Type	Exposure	Test Endpoint	Test Result
Dibenzoate Propanol	27138-31-4	Fathead Minnow	Experimental	96 hours	Lethal Concentration 50%	3.7 mg/l
Dibenzoate Propanol	27138-31-4	Green Algae	Experimental	72 hours	Effect Level 50%	4.9 mg/l
Dibenzoate Propanol	27138-31-4	Water flea	Experimental	48 hours	Effect Level 50%	19.31 mg/l
Dibenzoate Propanol	27138-31-4	Green Algae	Experimental	72 hours	Effect Concentration 10%	0.89 mg/l
Acrylate Polymer	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			
Organic Peroxide	13122-18-4	Green Algae	Experimental		Effect Concentration 50%	0.51 mg/l
Organic Peroxide	13122-18-4	Rainbow Trout	Experimental		Lethal Concentration 50%	7 mg/l
Organic Peroxide	13122-18-4	Water flea	Experimental		Effect Concentration 50%	>100 mg/l
Organic Peroxide	13122-18-4	Green Algae	Experimental		No obs Effect Conc	0.125 mg/l

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Dibenzoate Propanol	27138-31-4	Experimental Biodegradation	28 days	Carbon dioxide evolution	85 % weight	OECD 301B - Mod. Sturm or CO2
Acrylate Polymer	25101-28-4	Data not availbl-insufficient			N/A	
Catalyst (NJTS	Trade Secret	Estimated		Photolytic half-	1.48 days (t	Other methods

Reg. No. 04499600-6922)		Photolysis		life (in air)	1/2)	
Catalyst (NJTS Reg. No. 04499600-6922)	Trade Secret	Experimental Biodegradation	28 days	Carbon dioxide evolution	29.1 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
Organic Peroxide	13122-18-4	Estimated Biodegradation	28	Biological Oxygen Demand	14 % BOD/ThBOD	OECD 301C - MITI (I)

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Dibenzoate Propanol	27138-31-4	Estimated Bioconcentration		Bioaccumulation Factor	8	Est: Bioconcentration factor
Acrylate Polymer	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 of Octanol/H2O part. coeff	2.57	Other methods
Organic Peroxide	13122-18-4	Estimated Bioconcentration		Bioaccumulation Factor	363	Est: 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

According to the Environmental Quality (Scheduled Wastes) Regulations 2005, scheduled waste has to be sent to a prescribed premise for recycling, treatment or disposal. Please approach Kualiti Alam for proper schedule waste classification and disposal.

SECTION 14: Transport Information

Not hazardous for transportation.

Marine Transport (IMDG)

UN Number: None assigned.
Proper Shipping Name: None assigned.
Technical Name: None assigned.
Hazard Class/Division: None assigned.
Subsidiary Risk: None assigned.

Packing Group: None assigned.
Limited Quantity: None assigned.
Marine Pollutant: None assigned.
Marine Pollutant Technical Name: None assigned.
Other Dangerous Goods Descriptions:
None assigned.

Air Transport (IATA)

UN Number: None assigned.
Proper Shipping Name: None assigned.
Technical Name: None assigned.
Hazard Class/Division: None assigned.
Subsidiary Risk: None assigned.
Packing Group: None assigned.
Limited Quantity: None assigned.
Marine Pollutant: None assigned.
Marine Pollutant Technical Name: None assigned.
Other Dangerous Goods Descriptions:
None assigned.

Transportation classifications are provided as a customer service. As for shipping, YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling or marking requirements. The above information is only for reference. If you are shipping by air or ocean, YOU are advised to check & meet applicable regulatory requirements.

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 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

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 Malaysia SDSs are available at www.3M.com.my

Safety Data Sheet

Document Group:	31-5476-2	**Version Number:**	3.00
Issue Date:	19/11/2019	**Supercedes Date:**	26/02/2019

This Safety Data Sheet has been prepared in accordance with the Malaysia Occupational Safety and Health (Chemical Classification, Labelling and Safety Data Sheets) Regulations 2013.

SECTION 1: Identification

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

1.2. Recommended use and restrictions on use

Recommended use
Adhesive

1.3. Supplier's details

ADDRESS:	3M Malaysia Sdn. Bhd., Level 8, Block F, Oasis Square, No.2, Jalan PJU 1A/7A, Ara Damansara 47301 Petaling, Jaya, Selangor
Telephone:	03-7884 2888
E Mail:	3mmyehsr@mmm.com
Website:	www.3M.com.my

1.4. Emergency telephone number
+60 03-7884 2888

SECTION 2: Hazard identification

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

2.2. Label elements
Signal word
Danger

Symbols
Exclamation mark | Health Hazard | Environment |

Pictograms

Hazard Statements

H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H360	May damage fertility or the unborn child.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

General:

P102	Keep out of reach of children.
P101	If medical advice is needed, have product container or label at hand.

Prevention:

P201	Obtain special instructions before use.
P280B	Wear protective gloves and eye/face protection.
P281	Use personal protective equipment as required.
P273	Avoid release to the environment.

Response:

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P308 + P313	IF exposed or concerned: Get medical advice/attention.

Storage:

P405	Store locked up.

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	C.A.S. No.	% by Wt
Tetrahydrofurfuryl Methacrylate	2455-24-5	25 - 45
Fillers (NJTS Reg. No. 04499600-6923)	Trade Secret	10 - 30
Butadiene-Acrylonitrile Polymer	9003-18-3	1 - 20
Hydroxyethyl Methacrylate	868-77-9	1 - 20
Isobornyl Methacrylate	7534-94-3	1 - 20
Bisphenol A Polyethylene Glycol Diether Dimethacrylate	41637-38-1	0.1 - 10
Calcium Stearate	1592-23-0	0.1 - 10
Fillers (NJTS Reg. No. 04499600-7436)	Trade Secret	1 - 10
Phosphate Esters of PPG Methacrylate	95175-93-2	< 3

Tetrahydrofurfuryl Alcohol	97-99-4	< 0.2
Copper Naphthenates	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
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
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Chloride	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 dikes 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 authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. 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
Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/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 oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) 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 oxidizing 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	C.A.S. No.	Agency	Limit type	Additional Comments
COPPER COMPOUNDS	1338-02-9	ACGIH	TWA(as Cu dust or mist):1 mg/m3;TWA(as Cu, fume):0.2 mg/m3	
STEARATES	1592-23-0	ACGIH	TWA(inhalable fraction):10 mg/m3;TWA(respirable fraction):3 mg/m3	A4: Not class. as human carcin
STEARATES	1592-23-0	Malaysia OELs	TWA(8 hours):10 mg/m3	
Fillers (NJTS Reg. No. 04499600-6923)	Trade Secret	ACGIH	TWA(inhalable particulates):10 mg/m3;TWA(respirable fraction):2 mg/m3;TWA(respirable particles):3 mg/m3	A4: Not class. as human carcin
Fillers (NJTS Reg. No. 04499600-6923)	Trade Secret	Malaysia OELs	TWA (proposed)(Inhalable particulate)(8 hours):10 mg/m3;TWA (proposed)(respirable fraction)(8 hours):2 mg/m3;TWA (proposed)(respirable	

			particles)(8 hours):3 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists
CMRG : Chemical Manufacturer's Recommended Guidelines
Malaysia OELs : Malaysia. Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations
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/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

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

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 the following material(s) may be used:Nitrile Rubber

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 vapors 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
Color	White
Odor	Acrylate
Odor 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*
Vapor Pressure	*No Data Available*
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	100,000 - 125,000 mPa-s
Molecular weight	*No Data Available*
VOC Less H2O & Exempt Solvents	2.8 g/l [*Details:*when used as intended with Part A]
VOC Less H2O & Exempt Solvents	0.3 % [*Details:*when used as intended with Part A]

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 polymerization will not occur.

10.4. Conditions to avoid
Heat
Sparks and/or flames

10.5. Incompatible materials
Amines
Strong acids
Strong bases
Strong oxidizing 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 labeling, 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 diarrhea.

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
Hydroxyethyl Methacrylate	Dermal	Rabbit	LD50 > 5,000 mg/kg
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 > 2,000 mg/kg
Fillers (NJTS Reg. No. 04499600-6923)	Dermal		LD50 estimated to be > 5,000 mg/kg
Fillers (NJTS Reg. No. 04499600-6923)	Ingestion	Human	LD50 > 15,000 mg/kg
Bisphenol A Polyethylene Glycol Diether Dimethacrylate	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
Bisphenol A Polyethylene Glycol Diether Dimethacrylate	Ingestion	Rat	LD50 > 2,000 mg/kg
Phosphate Esters of PPG Methacrylate	Ingestion	Rat	LD50 > 5,000 mg/kg
Phosphate Esters of PPG Methacrylate	Dermal	similar	LD50 estimated to be > 5,000 mg/kg

		health hazards	
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
Copper Naphthenates	Dermal	similar compounds	LD50 > 2,000 mg/kg
Copper Naphthenates	Ingestion	similar compounds	LD50 >300, < 2,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Tetrahydrofurfuryl Methacrylate	Rabbit	No significant irritation
Hydroxyethyl Methacrylate	Rabbit	Minimal irritation
Butadiene-Acrylonitrile Polymer	Professional judgement	No significant irritation
Isobornyl Methacrylate	Rabbit	Mild irritant
Fillers (NJTS Reg. No. 04499600-6923)	Professional judgement	No significant irritation
Phosphate Esters of PPG Methacrylate	Not available	Irritant
Tetrahydrofurfuryl Alcohol	Rabbit	No significant irritation
Copper Naphthenates	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Tetrahydrofurfuryl Methacrylate	Rabbit	No significant irritation
Hydroxyethyl Methacrylate	Rabbit	Moderate irritant
Butadiene-Acrylonitrile Polymer	Professional judgement	No significant irritation
Isobornyl Methacrylate	Rabbit	Mild irritant
Fillers (NJTS Reg. No. 04499600-6923)	Professional judgement	No significant irritation
Phosphate Esters of PPG Methacrylate	Not available	Corrosive
Tetrahydrofurfuryl Alcohol	Rabbit	Severe irritant
Copper Naphthenates	In vitro data	No significant irritation

Skin Sensitization

Name	Species	Value
Tetrahydrofurfuryl Methacrylate	In vitro data	Sensitizing
Hydroxyethyl Methacrylate	Human and animal	Sensitizing

Isobornyl Methacrylate	Guinea pig	Not classified
Bisphenol A Polyethylene Glycol Diether Dimethacrylate	Guinea pig	Not classified
Tetrahydrofurfuryl Alcohol	Mouse	Not classified
Copper Naphthenates	Guinea pig	Not classified

Respiratory Sensitization

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
Hydroxyethyl Methacrylate	In vivo	Not mutagenic
Hydroxyethyl Methacrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification
Bisphenol A Polyethylene Glycol Diether Dimethacrylate	In Vitro	Not mutagenic
Tetrahydrofurfuryl Alcohol	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Fillers (NJTS Reg. No. 04499600-6923)	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
Hydroxyethyl Methacrylate	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
Hydroxyethyl Methacrylate	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	49 days
Hydroxyethyl Methacrylate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
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

Phosphate Esters of PPG Methacrylate	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
Fillers (NJTS Reg. No. 04499600-6923)	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL NA	occupational exposure
Fillers (NJTS Reg. No. 04499600-6923)	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 labeling, 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 2: Toxic to aquatic life with long lasting effects

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
Tetrahydrofurfuryl Methacrylate	2455-24-5	Fathead Minnow	Experimental	96 hours	Lethal Concentration 50%	34.7 mg/l
Tetrahydrofurfuryl Methacrylate	2455-24-5	Green algae	Experimental	72 hours	Effect Concentration 50%	>100 mg/l
Tetrahydrofurfuryl Methacrylate	2455-24-5	Green algae	Experimental	72 hours	Effect Concentration 10%	>100 mg/l
Tetrahydrofurfuryl Methacrylate	2455-24-5	Water flea	Experimental	21 days	No obs Effect Conc	37.2 mg/l
Fillers (NJTS Reg. No. 04499600-6923)	Trade Secret	Water flea	Experimental	48 hours	Lethal Concentration 50%	>1,100 mg/l
Butadiene-Acrylonitrile Polymer	9003-18-3		Data not available or insufficient for classification			
Hydroxyethyl Methacrylate	868-77-9	Fathead Minnow	Experimental	96 hours	Lethal Concentration 50%	227 mg/l
Hydroxyethyl Methacrylate	868-77-9	Green algae	Experimental	72 hours	Effect Concentration 50%	710 mg/l
Hydroxyethyl Methacrylate	868-77-9	Water flea	Experimental	48 hours	Effect Concentration 50%	380 mg/l
Hydroxyethyl Methacrylate	868-77-9	Green Algae	Experimental	72 hours	No obs Effect Conc	160 mg/l
Hydroxyethyl Methacrylate	868-77-9	Water flea	Experimental	21 days	No obs Effect Conc	24.1 mg/l
Isobornyl Methacrylate	7534-94-3	Green Algae	Experimental	72 hours	Effect Concentration 50%	2.3 mg/l
Isobornyl Methacrylate	7534-94-3	Water flea	Experimental	48 hours	Effect Concentration 50%	1.1 mg/l
Isobornyl Methacrylate	7534-94-3	Zebra Fish	Experimental	96 hours	Lethal Concentration 50%	1.8 mg/l
Isobornyl Methacrylate	7534-94-3	Green Algae	Experimental	72 hours	Effect Concentration 10%	0.751 mg/l
Isobornyl Methacrylate	7534-94-3	Water flea	Experimental	21 days	No obs Effect Conc	0.233 mg/l
Bisphenol A Polyethylene Glycol Diether Dimethacrylate	41637-38-1	Green algae	Endpoint not reached	72 hours	Effect Concentration 50%	>100 mg/l
Bisphenol A Polyethylene	41637-38-1	Green algae	Experimental	72 hours	No obs Effect Conc	0.05 mg/l

Glycol Diether Dimethacrylate						
Calcium Stearate	1592-23-0	Green algae	Experimental	72 hours	Effect Concentration 50%	>100 mg/l
Calcium Stearate	1592-23-0	Ricefish	Experimental	96 hours	Lethal Concentration 50%	>100 mg/l
Calcium Stearate	1592-23-0	Green algae	Experimental	72 hours	No obs Effect Conc	100 mg/l
Phosphate Esters of PPG Methacrylate	95175-93-2		Data not available or insufficient for classification			
Tetrahydrofurfuryl Alcohol	97-99-4	Green Algae	Experimental	72 hours	Effect Concentration 50%	>100 mg/l
Tetrahydrofurfuryl Alcohol	97-99-4	Ricefish	Experimental	96 hours	Lethal Concentration 50%	>100 mg/l
Tetrahydrofurfuryl Alcohol	97-99-4	Water flea	Experimental	48 hours	Effect Concentration 50%	>100 mg/l
Tetrahydrofurfuryl Alcohol	97-99-4	Green Algae	Experimental	72 hours	No obs Effect Conc	>100 mg/l
Tetrahydrofurfuryl Alcohol	97-99-4	Water flea	Experimental	21 days	No obs Effect Conc	>100 mg/l
Copper Naphthenates	1338-02-9	Green Algae	Estimated	72 hours	Effect Concentration 50%	0.629 mg/l
Copper Naphthenates	1338-02-9	Water flea	Estimated	48 hours	Effect Concentration 50%	0.0756 mg/l
Copper Naphthenates	1338-02-9	Zebra Fish	Estimated	96 hours	Lethal Concentration 50%	0.0702 mg/l
Copper Naphthenates	1338-02-9	Algae or other aquatic plants	Estimated	hours	No obs Effect Conc	0.132 mg/l
Copper Naphthenates	1338-02-9	Fathead Minnow	Estimated	32 days	Effect Concentration 10%	0.0354 mg/l
Copper Naphthenates	1338-02-9	Water flea	Estimated	21 days	No obs Effect Conc	0.0756 mg/l

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Tetrahydrofurfuryl Methacrylate	2455-24-5	Experimental Biodegradation	28 days	Biological Oxygen Demand	75 % BOD/ThBOD	OECD 301F - Manometric Respiro
Fillers (NJTS Reg. No. 04499600-6923)	Trade Secret	Data not availbl-insufficient			N/A	

Butadiene-Acrylonitrile Polymer	9003-18-3	Data not availbl-insufficient			N/A	
Hydroxyethyl Methacrylate	868-77-9	Experimental Biodegradation	14 days	Biological Oxygen Demand	95 % BOD/ThBOD	OECD 301C - MITI (I)
Isobornyl Methacrylate	7534-94-3	Estimated Photolysis		Photolytic half-life (in air)	1.12 days (t 1/2)	Other methods
Isobornyl Methacrylate	7534-94-3	Experimental Biodegradation	28 days	Carbon dioxide evolution	70 % weight	OECD 310 CO2 Headspace
Bisphenol A Polyethylene Glycol Diether Dimethacrylate	41637-38-1	Estimated Biodegradation	28 days	Carbon dioxide evolution	7-12 % weight	OECD 301B - Mod. Sturm or CO2
Calcium Stearate	1592-23-0	Experimental Biodegradation	24 days	Carbon dioxide evolution	91 % weight	OECD 301B - Mod. Sturm or CO2
Phosphate Esters of PPG Methacrylate	95175-93-2	Data not availbl-insufficient			N/A	
Tetrahydrofurfuryl Alcohol	97-99-4	Experimental Biodegradation	28 days	Biological Oxygen Demand	92 % weight	OECD 301C - MITI (I)
Copper Naphthenates	1338-02-9	Data not availbl-insufficient			N/A	

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Tetrahydrofurfuryl Methacrylate	2455-24-5	Estimated Bioconcentration		Bioaccumulation Factor	3.42	Est: Bioconcentration factor
Fillers (NJTS Reg. No. 04499600-6923)	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Butadiene-Acrylonitrile Polymer	9003-18-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydroxyethyl Methacrylate	868-77-9	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	0.42	Other methods
Isobornyl Methacrylate	7534-94-3	Estimated Bioconcentration		Bioaccumulation Factor	39	Est: Bioconcentration factor
Bisphenol A Polyethylene Glycol Diether Dimethacrylate	41637-38-1	Estimated Bioconcentration		Bioaccumulation Factor	6.6	Est: Bioconcentration factor
Calcium Stearate	1592-23-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Phosphate	95175-93-2	Data not	N/A	N/A	N/A	N/A

Esters of PPG Methacrylate		available or insufficient for classification				
Tetrahydrofurfuryl Alcohol	97-99-4	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	-0.11	Other methods
Copper Naphthenates	1338-02-9	Estimated BCF-Carp	42 days	Bioaccumulation Factor	≤27	OECD 305E-Bioaccum Fl-thru fis

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

According to the Environmental Quality (Scheduled Wastes) Regulations 2005, scheduled waste has to be sent to a prescribed premise for recycling, treatment or disposal. Please approach Kualiti Alam for proper schedule waste classification and disposal.

SECTION 14: Transport Information

Marine Transport (IMDG)

UN Number: None assigned.
Proper Shipping Name: None assigned.
Technical Name: None assigned.
Hazard Class/Division: None assigned.
Subsidiary Risk: None assigned.
Packing Group: None assigned.
Limited Quantity: None assigned.
Marine Pollutant: None assigned.
Marine Pollutant Technical Name: None assigned.
Other Dangerous Goods Descriptions:
Not restricted, as per IMDG code 2.10.2.7, marine pollutant exception.

Air Transport (IATA)

UN Number: None assigned.
Proper Shipping Name: None assigned.
Technical Name: None assigned.
Hazard Class/Division: None assigned.
Subsidiary Risk: None assigned.
Packing Group: None assigned.
Limited Quantity: None assigned.
Marine Pollutant: None assigned.
Marine Pollutant Technical Name: None assigned.
Other Dangerous Goods Descriptions:
Not restricted, as per Special Provision A197, environmentally hazardous substance exception.

Transportation classifications are provided as a customer service. As for shipping, YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling or marking requirements. The above information is only for reference. If you are shipping by air or ocean, YOU are advised to check & meet applicable regulatory requirements.

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. The components of this product are in compliance with the chemical notification requirements of TSCA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory.

SECTION 16: Other information

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 Malaysia SDSs are available at www.3M.com.my