

## **Safety Data Sheet**

#### Copyright, 2024, 3M Company.

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

Document Group:	32-4148-6	Version Number:	4.00
Issue Date:	29/08/2024	Supercedes Date:	26/12/2022

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.

<b>IDENTIFICATION</b>	
-----------------------	--

#### 1.1. Product identifier

3M(TM) Scotch-Weld(TM) Acrylic Adhesive DP8410NS Green

<b>Product Identification</b>	Numbers		
62-2860-1445-1	62-2860-1450-1	62-2860-3630-6	62-2860-5030-7

#### 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<br/>Petaling, Jaya, SelangorTelephone:03-7884 2888E Mail:3mmyehsr@mmm.comWebsite: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:

32-4140-3, 32-4143-7

## **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 in this Safety Data Sheet (SDS) 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 SDS or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own evaluation to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into Malaysia, you are responsible for all applicable regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration/notification.

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



## Safety Data Sheet

#### Copyright, 2024, 3M Company.

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

Document Group:	32-4143-7	Version Number:	5.00
Issue Date:	28/08/2024	Supercedes Date:	26/12/2022

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) Acrylic Adhesive DP8410NS 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<br/>Petaling, Jaya, SelangorTelephone:03-7884 2888E Mail:3mmyehsr@mmm.comWebsite: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

Flammable Liquid: Category 2.
Skin Corrosion/Irritation: Category 2.
Serious Eye Damage/Irritation: Category 2.
Skin Sensitizer: Category 1.
Specific Target Organ Toxicity (repeated exposure): Category 1.
Specific Target Organ Toxicity (single exposure): Category 3.
Chronic Aquatic Toxicity: Category 3.

2.2. Label elements Signal word Danger

Symbols Flame |Exclamation mark |Health Hazard |

### Pictograms



Hazard Statements: H225	Highly flammable liquid and vapor.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure: sensory organs.
H412	Harmful to aquatic life with long lasting effects.
Precautionary statements	
Prevention:	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P280E	Wear protective gloves.
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.
P370 + P378	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.
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	
Methyl Methacrylate	80-62-6	45 - 65	
Kaolin	1332-58-7	1 - 20	
Acrylonitrile-Butadiene Polymer	9003-18-3	1 - 20	
Bisphenol A Polyethylene Glycol Diether	41637-38-1	0.1 - 10	
Dimethacrylate			
Hydroxyethyl Methacrylate	868-77-9	< 10	
Calcium Stearate	1592-23-0	0.1 - 5	
Phosphate Esters of PPG Methacrylate	95175-93-2	< 3	
Copper Naphthenates	1338-02-9	<= 1	

Petroleum Distillates 64742-55-8	<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

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain). Allergic skin reaction (redness, swelling, blistering, and itching). Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

#### 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 flammable liquids such as dry chemical or carbon dioxide to extinguish.

### 5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

#### **Hazardous Decomposition or By-Products**

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Chloride	During Combustion
Oxides of Nitrogen	During Combustion

### 5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. 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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. 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. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. 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. Cover spill area with a fire-extinguishing foam. 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 using non-sparking tools. Place in a metal 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

For industrial/occupational use only. Not for consumer sale or use. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. 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.) Wear low static or properly grounded shoes. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

### 7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Protect from sunlight. Store away from heat. 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
Kaolin	1332-58-7	ACGIH	TWA(respirable fraction):2 mg/m3	A4: Not class. as human carcin
Kaolin	1332-58-7	Malaysia OELs	TWA (proposed)(respirable fraction)(8 hours):2 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	
STEARATES	1592-23-0	ACGIH	TWA(respirable fraction):3 mg/m3;TWA(inhalable fraction):10 mg/m3	A4: Not class. as human carcin
STEARATES	1592-23-0	Malaysia OELs	TWA(8 hours):10 mg/m3	
OIL MIST, MINERAL	64742-55-8	Malaysia OELs	TWA(as mist)(8 hours):5 mg/m3	

Methyl Methacrylate	80-62-6	ACGIH	TWA:50 ppm;STEL:100 ppm	A4: Not class. as human carcin, Dermal
				Sensitizer
Methyl Methacrylate	80-62-6	Malaysia OELs	TWA(8 hours):410	
			mg/m3(100 ppm)	

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. Use explosion-proof ventilation 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: Butyl Rubber 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 – Butyl rubber 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	White		
Odor	Strong Methacrylate		
Odor threshold	No Data Available		
pH			
1	Not Applicable Not Applicable		
Melting point/Freezing point	>=37.8 °C		
Boiling point/Initial boiling point/Boiling range Flash Point			
	>=10 °C [ <i>Test Method</i> :Closed Cup]		
Evaporation rate	No Data Available		
Flammability	Flammable Liquid: Category 2.		
Flammable Limits(LEL)	No Data Available		
Flammable Limits(UEL)	No Data Available		
Vapor Pressure	No Data Available		
Vapor Density and/or Relative Vapor Density	No Data Available		
Density	1.07 g/ml		
Relative Density	1.07 [ <i>Ref Std</i> :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		
Kinematic Viscosity	56,075 mm2/sec		
Volatile Organic Compounds	No Data Available		
Percent volatile	No Data Available		
VOC Less H2O & Exempt Solvents	17.2 g/l [Details: when used as intended with Part A]		
VOC Less H2O & Exempt Solvents	1.6 % [Details: when used as intended with Part A]		
Molecular weight	No Data Available		

**Particle Characteristics** 

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 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**

#### <u>Substance</u>

None known.

#### **Condition**

Refer to section 5.2 for hazardous decomposition products during combustion.

## **SECTION 11: Toxicological information**

The information below may not 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:

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

#### **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.

### **Additional Health Effects:**

#### Prolonged or repeated exposure may cause target organ effects:

Olfactory Effects: Signs/symptoms may include decreased ability to detect odors and/or complete loss of smell.

#### **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	Inhalation-		No data available; calculated ATE >50 mg/l
	Vapor(4 hr)		
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Methyl Methacrylate	Dermal	Rabbit	LD50 > 5,000 mg/kg
Methyl Methacrylate	Inhalation-	Rat	LC50 29.8 mg/l
	Vapor (4		
	hours)		
Methyl Methacrylate	Ingestion	Rat	LD50 7,900 mg/kg

Acrylonitrile-Butadiene Polymer	Dermal	Rabbit	LD50 > 15,000 mg/kg
Acrylonitrile-Butadiene Polymer	Ingestion	Rat	LD50 > 30,000 mg/kg
Bisphenol A Polyethylene Glycol Diether Dimethacrylate	Dermal	Rat	LD50 > 2,000 mg/kg
Bisphenol A Polyethylene Glycol Diether Dimethacrylate	Ingestion	Rat	LD50 > 35,000 mg/kg
Kaolin	Dermal		LD50 estimated to be > 5,000 mg/kg
Kaolin	Ingestion	Human	LD50 > 15,000 mg/kg
Hydroxyethyl Methacrylate	Dermal	Rabbit	LD50 > 5,000 mg/kg
Hydroxyethyl Methacrylate	Ingestion	Rat	LD50 5,564 mg/kg
Phosphate Esters of PPG Methacrylate	Ingestion	Rat	LD50 > 5,000 mg/kg
Phosphate Esters of PPG Methacrylate	Dermal	similar health hazards	LD50 estimated to be > 5,000 mg/kg
Calcium Stearate	Dermal	Rat	LD50 > 2,000 mg/kg
Calcium Stearate	Ingestion	Rat	LD50 > 2,000 mg/kg
Petroleum Distillates	Dermal	similar compoun ds	LD50 > 2,000 mg/kg
Petroleum Distillates	Inhalation- Dust/Mist (4 hours)	similar compoun ds	LC50 > 5.53 mg/l
Petroleum Distillates	Ingestion	similar compoun ds	LD50 > 5,000 mg/kg
Copper Naphthenates	Dermal	similar compoun ds	LD50 > 2,000 mg/kg
Copper Naphthenates	Ingestion	similar compoun ds	LD50 >300, < 2,000 mg/kg

ATE = acute toxicity estimate

### **Skin Corrosion/Irritation**

Name	Species	Value
Methyl Methacrylate	Rabbit	Irritant
Acrylonitrile-Butadiene Polymer	Professio	No significant irritation
	nal	
	judgemen t	
Bisphenol A Polyethylene Glycol Diether Dimethacrylate	Rabbit	Minimal irritation
Kaolin	Professio	No significant irritation
	nal	
	judgemen	
Hydroxyethyl Methacrylate	Rabbit	Minimal irritation
Phosphate Esters of PPG Methacrylate	Not	Irritant
	available	
Calcium Stearate	In vitro	No significant irritation
	data	
Petroleum Distillates	similar	No significant irritation
	compoun	
	ds	
Copper Naphthenates	Rabbit	No significant irritation

### Serious Eye Damage/Irritation

Name	Species	Value		
Methyl Methacrylate	Rabbit	Mild irritant		
Acrylonitrile-Butadiene Polymer	Professio nal judgemen t	No significant irritation		
Bisphenol A Polyethylene Glycol Diether Dimethacrylate	Rabbit	No significant irritation		
Kaolin	Professio	No significant irritation		
	nal			

	judgemen t	
Hydroxyethyl Methacrylate	Rabbit	Moderate irritant
Phosphate Esters of PPG Methacrylate	Not available	Corrosive
Calcium Stearate	In vitro data	No significant irritation
Petroleum Distillates	similar compoun ds	No significant irritation
Copper Naphthenates	In vitro data	No significant irritation

## Sensitization:

### **Skin Sensitization**

Name	Species	Value
Methyl Methacrylate	Human and animal	Sensitizing
Bisphenol A Polyethylene Glycol Diether Dimethacrylate	Guinea pig	Not classified
Hydroxyethyl Methacrylate	Human and animal	Sensitizing
Calcium Stearate	similar compoun ds	Not classified
Petroleum Distillates	similar compoun ds	Not classified
Copper Naphthenates	Guinea pig	Not classified

### **Respiratory Sensitization**

Name	Species	Value
Methyl Methacrylate	Human	Not classified

## Germ Cell Mutagenicity

Name	Route	Value
Methyl Methacrylate	In vivo	Not mutagenic
Methyl 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
Hydroxyethyl Methacrylate	In vivo	Not mutagenic
Hydroxyethyl Methacrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification
Calcium Stearate	In Vitro	Not mutagenic
Petroleum Distillates	In Vitro	Not mutagenic

## Carcinogenicity

Name	Route	Species	Value
Methyl Methacrylate	Ingestion	Rat	Not carcinogenic
Methyl Methacrylate	Inhalation	Human and animal	Not carcinogenic
Kaolin	Inhalation	Multiple animal species	Not carcinogenic

## **Reproductive Toxicity**

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

Name	Route	Value	Species	Test Result	Exposure Duration
Methyl Methacrylate	Ingestion	Not classified for female reproduction	Rat	NOAEL 400 mg/kg/day	2 generation
Methyl Methacrylate	Ingestion	Not classified for male reproduction	Rat	NOAEL 400 mg/kg/day	2 generation
Methyl Methacrylate	Ingestion	Not classified for development	Rabbit	NOAEL 450 mg/kg/day	during gestation
Methyl Methacrylate	Inhalation	Not classified for development	Rat	NOAEL 8.3 mg/l	during organogenesis
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
Calcium Stearate	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
Calcium Stearate	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	28 days
Calcium Stearate	Ingestion	Not classified for development	Rat	NOAEL 1,000 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
Methyl Methacrylate	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure
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	

## Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Methyl Methacrylate	Dermal	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
Methyl Methacrylate	Inhalation	olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Methyl Methacrylate	Inhalation	kidney and/or bladder	Not classified	Multiple animal species	NOAEL Not available	14 weeks
Methyl Methacrylate	Inhalation	liver	Not classified	Mouse	NOAEL 12.3 mg/l	14 weeks
Methyl Methacrylate	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
Methyl Methacrylate	Ingestion	kidney and/or bladder   heart   skin   endocrine system   gastrointestinal tract   hematopoietic system   liver   muscles   nervous system   respiratory	Not classified	Rat	NOAEL 90.3 mg/kg/day	2 years

		system				
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	
Calcium Stearate	Ingestion	hematopoietic system   nervous system   kidney and/or bladder   heart   skin   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   liver   immune system   eyes   respiratory system	Not classified	Rat	NOAEL 2,000 mg/kg/day	28 days

#### **Aspiration Hazard**

Name	Value
Petroleum Distillates	Aspiration hazard

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

## **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	Туре	Exposure	Test Endpoint	Test Result
Methyl Methacrylate	80-62-6	Green algae	Experimental	72 hours	EC50	>110 mg/l
Methyl Methacrylate	80-62-6	Rainbow Trout	Experimental	96 hours	LC50	>79 mg/l
Methyl Methacrylate	80-62-6	Water flea	Experimental	48 hours	EC50	69 mg/l
Methyl Methacrylate	80-62-6	Green algae	Experimental	72 hours	NOEC	110 mg/l
Methyl Methacrylate	80-62-6	Water flea	Experimental	21 days	NOEC	37 mg/l
Methyl Methacrylate	80-62-6	Activated sludge	Experimental	30 minutes	EC20	150 mg/l
Methyl Methacrylate	80-62-6	Soil microbes	Experimental	28 days	NOEC	>1,000 mg/kg (Dry Weight)
Acrylonitrile- Butadiene Polymer	9003-18-3	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Kaolin	1332-58-7	Water flea	Experimental	48 hours	LC50	>1,100 mg/l

## 3M(TM) Scotch-Weld(TM) Acrylic Adhesive DP8410NS Green, Part B

Dianhanal A	41627 20 1	A stiveted sludge	Estimated	2 hours	EC50	>1.000 mg/l
Bisphenol A Polyethylene	41637-38-1	Activated sludge	Estimated	3 hours	EC30	>1,000 mg/l
Glycol Diether						
Dimethacrylate						
Bisphenol A	41637-38-1	Green algae	Estimated	72 hours	EL50	>100 mg/l
Polyethylene	1100, 00 1	or een uigue	Listimuteu	/2 1100110		100 mg.1
Glycol Diether						
Dimethacrylate						
Bisphenol A	41637-38-1	Water flea	Estimated	48 hours	EL50	>100 mg/l
Polyethylene						C C
Glycol Diether						
Dimethacrylate						
Bisphenol A	41637-38-1	Zebra Fish	Estimated	96 hours	LL50	>100 mg/l
Polyethylene						
Glycol Diether						
Dimethacrylate						
Hydroxyethyl	868-77-9	Turbot	Analogous	96 hours	LC50	833 mg/l
Methacrylate			Compound			
Hydroxyethyl	868-77-9	Fathead Minnow	Experimental	96 hours	LC50	227 mg/l
Methacrylate						
Hydroxyethyl	868-77-9	Green algae	Experimental	72 hours	EC50	710 mg/l
Methacrylate		0	1			
Hydroxyethyl	868-77-9	Water flea	Experimental	48 hours	EC50	380 mg/l
Methacrylate			1			e e
Hydroxyethyl	868-77-9	Green algae	Experimental	72 hours	NOEC	160 mg/l
Methacrylate		E E	1			e e
Hydroxyethyl	868-77-9	Water flea	Experimental	21 days	NOEC	24.1 mg/l
Methacrylate			r · · · ·			
Hydroxyethyl	868-77-9	N/A	Experimental	16 hours	EC0	>3,000 mg/l
Methacrylate			I			-,
Hydroxyethyl	868-77-9	N/A	Experimental	18 hours	LD50	<98 mg per kg of bodyweight
Methacrylate			P			,
Calcium Stearate	1592-23-0	Green algae	Experimental	72 hours	EC50	>100 mg/l
Calcium Stearate	1592-23-0	Medaka	Experimental	96 hours	LC50	>100 mg/l
Calcium Stearate	1592-23-0	Green algae	Experimental	72 hours	NOEC	100 mg/l
Phosphate Esters of		N/A	Data not available	N/A	N/A	N/A
PPG Methacrylate	55115 55 2	1,71	or insufficient for	10/1	1,71	1.011
110 menuery auto			classification			
Copper	1338-02-9	Green algae	Estimated	72 hours	ErC50	0.629 mg/l
Naphthenates	1550 02 9	Green uigue	Estimated	/2 110415	LICSO	0.029 mg/
Copper	1338-02-9	Water flea	Estimated	48 hours	EC50	0.0756 mg/l
Naphthenates	1550 02 9	Water neu	Estimated	io nouis	Leso	0.0700 mg/r
Copper	1338-02-9	Zebra Fish	Estimated	96 hours	LC50	0.07 mg/l
Naphthenates	1550 02 9	Loolu i ish	Estimated	yo nours	Leso	0.07 mg/r
Copper	1338-02-9	Fathead Minnow	Estimated	32 days	EC10	0.0354 mg/l
Naphthenates	1550 02 9	i unicua minito v	Estimated	52 auys	Lero	0.055 1 mg/1
Copper	1338-02-9	Green algae	Estimated	N/A	NOEC	0.132 mg/l
Naphthenates	1550 02 7	Green argue	Estimated	1 1/2 1	nole	0.152 mg/1
Copper						
	1338-02-9	Sediment Worm	Estimated	28 days	NOEC	110 mg/kg (Dry Weight)
	1338-02-9	Sediment Worm	Estimated	28 days	NOEC	110 mg/kg (Dry Weight)
Naphthenates				_		
Naphthenates Copper	1338-02-9 1338-02-9	Sediment Worm Water flea	Estimated Estimated	28 days 7 days	NOEC NOEC	110 mg/kg (Dry Weight) 0.02 mg/l
Naphthenates Copper Naphthenates	1338-02-9	Water flea	Estimated	7 days	NOEC	0.02 mg/l
Naphthenates Copper Naphthenates Copper				_		
Naphthenates Copper Naphthenates Copper Naphthenates	1338-02-9 1338-02-9	Water flea Activated sludge	Estimated Estimated	7 days N/A	NOEC EC50	0.02 mg/l 42 mg/l
Naphthenates Copper Naphthenates Copper Naphthenates Copper	1338-02-9	Water flea	Estimated	7 days	NOEC	0.02 mg/l
Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates	1338-02-9 1338-02-9 1338-02-9	Water flea Activated sludge Barley	Estimated Estimated Estimated	7 days N/A 4 days	NOEC EC50 NOEC	0.02 mg/l 42 mg/l 96 mg/kg (Dry Weight)
Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper	1338-02-9 1338-02-9	Water flea Activated sludge	Estimated Estimated	7 days N/A	NOEC EC50	0.02 mg/l 42 mg/l
Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates	1338-02-9 1338-02-9 1338-02-9 1338-02-9	Water flea Activated sludge Barley Redworm	Estimated Estimated Estimated Estimated	7 days N/A 4 days 56 days	NOEC EC50 NOEC NOEC	0.02 mg/l           42 mg/l           96 mg/kg (Dry Weight)           60 mg/kg (Dry Weight)
Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper	1338-02-9 1338-02-9 1338-02-9	Water flea Activated sludge Barley	Estimated Estimated Estimated	7 days N/A 4 days	NOEC EC50 NOEC	0.02 mg/l 42 mg/l 96 mg/kg (Dry Weight)
Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates	1338-02-9         1338-02-9         1338-02-9         1338-02-9         1338-02-9         1338-02-9	Water flea Activated sludge Barley Redworm Soil microbes	Estimated Estimated Estimated Estimated Estimated	7 days N/A 4 days 56 days 4 days	NOEC EC50 NOEC NOEC NOEC	0.02 mg/l           42 mg/l           96 mg/kg (Dry Weight)           60 mg/kg (Dry Weight)           72 mg/kg (Dry Weight)
Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper	1338-02-9 1338-02-9 1338-02-9 1338-02-9	Water flea Activated sludge Barley Redworm	Estimated Estimated Estimated Estimated	7 days N/A 4 days 56 days	NOEC EC50 NOEC NOEC	0.02 mg/l           42 mg/l           96 mg/kg (Dry Weight)           60 mg/kg (Dry Weight)
Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates	1338-02-9         1338-02-9         1338-02-9         1338-02-9         1338-02-9         1338-02-9         1338-02-9	Water flea Water flea Activated sludge Barley Redworm Soil microbes Springtail	Estimated Estimated Estimated Estimated Estimated Estimated	7 days N/A 4 days 56 days 4 days 28 days	NOEC EC50 NOEC NOEC NOEC NOEC	0.02 mg/l           42 mg/l           96 mg/kg (Dry Weight)           60 mg/kg (Dry Weight)           72 mg/kg (Dry Weight)           167 mg/kg (Dry Weight)
Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Petroleum	1338-02-9         1338-02-9         1338-02-9         1338-02-9         1338-02-9         1338-02-9	Water flea Activated sludge Barley Redworm Soil microbes	Estimated Estimated Estimated Estimated Estimated	7 days N/A 4 days 56 days 4 days	NOEC EC50 NOEC NOEC NOEC	0.02 mg/l           42 mg/l           96 mg/kg (Dry Weight)           60 mg/kg (Dry Weight)           72 mg/kg (Dry Weight)
Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Petroleum Distillates	1338-02-9 1338-02-9 1338-02-9 1338-02-9 1338-02-9 1338-02-9 64742-55-8	Water flea Activated sludge Barley Redworm Soil microbes Springtail Fathead Minnow	Estimated Estimated Estimated Estimated Estimated Estimated Estimated	7 days N/A 4 days 56 days 4 days 28 days 96 hours	NOEC EC50 NOEC NOEC NOEC NOEC LL50	0.02 mg/l           42 mg/l           96 mg/kg (Dry Weight)           60 mg/kg (Dry Weight)           72 mg/kg (Dry Weight)           167 mg/kg (Dry Weight)           >100 mg/l
Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Petroleum Distillates Petroleum	1338-02-9         1338-02-9         1338-02-9         1338-02-9         1338-02-9         1338-02-9         1338-02-9	Water flea Activated sludge Barley Redworm Soil microbes Springtail	Estimated Estimated Estimated Estimated Estimated Estimated	7 days N/A 4 days 56 days 4 days 28 days	NOEC EC50 NOEC NOEC NOEC NOEC	0.02 mg/l           42 mg/l           96 mg/kg (Dry Weight)           60 mg/kg (Dry Weight)           72 mg/kg (Dry Weight)           167 mg/kg (Dry Weight)
Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Copper Naphthenates Petroleum Distillates	1338-02-9 1338-02-9 1338-02-9 1338-02-9 1338-02-9 1338-02-9 64742-55-8	Water flea Activated sludge Barley Redworm Soil microbes Springtail Fathead Minnow	Estimated Estimated Estimated Estimated Estimated Estimated Estimated	7 days N/A 4 days 56 days 4 days 28 days 96 hours	NOEC EC50 NOEC NOEC NOEC NOEC LL50	0.02 mg/l           42 mg/l           96 mg/kg (Dry Weight)           60 mg/kg (Dry Weight)           72 mg/kg (Dry Weight)           167 mg/kg (Dry Weight)           >100 mg/l

Distillates					
Petroleum	64742-55-8	Water flea	21 days	NOEC	10 mg/l
Distillates					

## 12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Methyl Methacrylate	80-62-6	Experimental Biodegradation	14 days	Biological Oxygen Demand	94 %BOD/ThOD	OECD 301C - MITI (I)
Acrylonitrile- Butadiene Polymer	9003-18-3	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Kaolin	1332-58-7	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Bisphenol A Polyethylene Glycol Diether Dimethacrylate	41637-38-1	Experimental Biodegradation	28 days	Percent degraded	24 %degraded	
Hydroxyethyl Methacrylate	868-77-9	Experimental Biodegradation	28 days	Biological Oxygen Demand	84 %BOD/COD	OECD 301D - Closed Bottle Test
Hydroxyethyl Methacrylate	868-77-9	Experimental Hydrolysis		Hydrolytic half-life basic pH	10.9 days (t 1/2)	OECD 111 Hydrolysis func of pH
Calcium Stearate	1592-23-0	Experimental Biodegradation	24 days	Carbon dioxide evolution	91 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
Phosphate Esters of PPG Methacrylate	95175-93-2	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Copper Naphthenates	1338-02-9	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Petroleum Distillates	64742-55-8	Estimated Biodegradation	28 days	Carbon dioxide evolution	22 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2

## 12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Methyl Methacrylate	80-62-6	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	1.38	OECD 107 log Kow shke flsk mtd
Acrylonitrile- Butadiene Polymer	9003-18-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Kaolin	1332-58-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Bisphenol A Polyethylene Glycol Diether Dimethacrylate	41637-38-1	Estimated Bioconcentration		Bioaccumulation Factor	6.6	
Hydroxyethyl Methacrylate	868-77-9	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	0.42	OECD 107 log Kow shke flsk mtd
Calcium Stearate	1592-23-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Phosphate Esters of PPG Methacrylate	95175-93-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Copper Naphthenates	1338-02-9	Analogous Compound BCF - Fish	42 days	Bioaccumulation Factor	≤27	OECD305-Bioconcentration
Petroleum Distillates	64742-55-8	Data not available or insufficient for	N/A	N/A	N/A	N/A

classification		
----------------	--	--

### 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:UN1133 Proper Shipping Name:ADHESIVES CONTAINING FLAMMABLE LIQUID Technical Name:None assigned. Hazard Class/Division:3 Subsidiary Risk:None assigned. Packing Group:II 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:UN1133 Proper Shipping Name:ADHESIVES CONTAINING FLAMMABLE LIQUID Technical Name:None assigned. Hazard Class/Division:3 Subsidiary Risk:None assigned. Packing Group:II 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 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**

DISCLAIMER: The information in this Safety Data Sheet (SDS) 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 SDS or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own evaluation to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into Malaysia, you are responsible for all applicable regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration/notification.

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



## **Safety Data Sheet**

#### Copyright, 2024, 3M Company.

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

Document Group:	32-4140-3	Version Number:	4.00
Issue Date:	28/08/2024	Supercedes Date:	26/12/2022

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) Acrylic Adhesive DP8410NS 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<br/>Petaling, Jaya, SelangorTelephone:03-7884 2888E Mail:3mmyehsr@mmm.comWebsite: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	
<b>Prevention:</b> P280E	Wear protective gloves.
<b>Response:</b> P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
<b>Disposal:</b> 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	Trade Secret	1 - 15	
Benzoate Esters	None	< 11	
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:

If exposed, flush eyes with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms develop, 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

Part of the oxygen for combustion is supplied by the peroxide itself.

#### Hazardous Decomposition or By-Products

Substance	<u>Condition</u>
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	Mild Ester
Odor threshold	No Data Available
рН	Not Applicable
Melting point/Freezing point	Not Applicable
Boiling point/Initial boiling point/Boiling range	>=65.6 °C
Flash Point	> 93.3 °C [ <i>Test Method</i> :Closed Cup]
Evaporation rate	No Data Available
Flammability	Not Applicable

Flammable Limits(LEL)	No Data Available
Flammable Limits(UEL)	No Data Available
Vapor Pressure	No Data Available
Vapor Density and/or Relative Vapor Density	No Data Available
Density	1.08 g/ml
Relative Density	1.08 [ <i>Ref Std</i> :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
Kinematic Viscosity	18,519 mm2/sec
Volatile Organic Compounds	No Data Available
Percent volatile	No Data Available
VOC Less H2O & Exempt Solvents	2.8 g/l [Details: when used as intended with Part B.]
Molecular weight	No Data Available

# Particle Characteristics

*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 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

<u>Substance</u>

None known.

**Condition** 

Refer to section 5.2 for hazardous decomposition products during combustion.

## **SECTION 11: Toxicological information**

The information below may not 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 ATE >2,000 - =5,000
			mg/kg
Dibenzoate Propanol	Dermal	Rat	LD50 > 2,000 mg/kg
Dibenzoate Propanol	Inhalation-	Rat	LC50 > 200  mg/l
	Dust/Mist		
	(4 hours)		
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	Dermal	Professio	LD50 estimated to be 2,000 - 5,000 mg/kg
		nal	
		judgeme	
		nt	
Catalyst	Ingestion	Rat	LD50 > 2,000 mg/kg
Organic Peroxide	Dermal	Rat	LD50 > 2,000 mg/kg
Organic Peroxide	Inhalation-	Rat	LC50 > 0.8 mg/l
	Dust/Mist		
	(4 hours)		
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

### Sensitization:

#### **Skin Sensitization**

Name	Species	Value
Dibenzoate Propanol	Guinea	Not classified
	pig	
Catalyst	Mouse	Not classified
Organic Peroxide	Guinea	Sensitizing
	pig	

#### **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	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	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	Туре	Exposure	Test Endpoint	Test Result
Dibenzoate Propanol	27138-31-4	Fathead Minnow	Experimental	96 hours	LC50	3.7 mg/l
Dibenzoate Propanol	27138-31-4	Green algae	Experimental	72 hours	EL50	4.9 mg/l
Dibenzoate Propanol	27138-31-4	Water flea	Experimental	48 hours	EL50	19.31 mg/l
Dibenzoate Propanol	27138-31-4	Green algae	Experimental	72 hours	EC10	0.89 mg/l
Acrylate Polymer	25101-28-4	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Catalyst	Trade Secret	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Organic Peroxide	13122-18-4	Green algae	Experimental	72 hours	ErC50	0.51 mg/l
Organic Peroxide	13122-18-4	Rainbow Trout	Experimental	96 hours	LC50	7.03 mg/l
Organic Peroxide	13122-18-4	Water flea	Experimental	48 hours	EC50	>100 mg/l
Organic Peroxide	13122-18-4	Green algae	Experimental	72 hours	NOEC	0.125 mg/l
Organic Peroxide	13122-18-4	Water flea	Experimental	21 days	NOEC	0.22 mg/l
Organic Peroxide	13122-18-4	Activated sludge	Experimental	3 hours	EC50	327.02 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 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
Acrylate Polymer	25101-28-4	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Catalyst	Trade Secret	Experimental Biodegradation	28 days	Carbon dioxide evolution	29.1 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
Catalyst	Trade Secret	Estimated Photolysis		Photolytic half-life (in air)	1.48 days (t 1/2)	
Organic Peroxide	13122-18-4	Experimental Biodegradation	28 days	Biological Oxygen Demand	72 %BOD/ThOD	OECD 301D - Closed Bottle Test
Organic Peroxide	13122-18-4	Experimental Aquatic Inherent Biodegrad.	56 days	Biological Oxygen Demand	58 %BOD/ThOD	OECD 302A - Modified SCAS Test

Organic Peroxide	13122-18-4	Experimental	Hydrolytic half-life	51 hours (t 1/2)	OECD 111 Hydrolysis func
_		Hydrolysis	(pH 7)		of pH

#### **12.3. Bioaccumulative potential**

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Dibenzoate Propanol	27138-31-4	Modeled Bioconcentration		Bioaccumulation Factor	8	Catalogic™
Acrylate Polymer	25101-28-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Catalyst	Trade Secret	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	2.57	
Organic Peroxide	13122-18-4	Modeled Bioconcentration		Bioaccumulation Factor	380	Catalogic™
Organic Peroxide	13122-18-4	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	5.16	OECD 117 log Kow HPLC method

### 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 in this Safety Data Sheet (SDS) 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 SDS or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own evaluation to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into Malaysia, you are responsible for all applicable regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration/notification.

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