

# Safety Data Sheet

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**Document Group:** 10-2966-9 **Version Number:** 8.00

**Issue Date:** 26/05/2021 **Supercedes Date:** 27/06/2019

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<sup>TM</sup> Industrial Plastic Adhesive 4475

#### **Product Identification Numbers**

62-4475-2631-0 62-4475-2635-1 62-4475-6530-0 62-4475-8531-6

#### 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

Flammable Liquid: Category 2.

Serious Eye Damage/Irritation: Category 2.

Reproductive Toxicity: Category 1B.

#### 2.2. Label elements

## Signal word

Danger

#### **Symbols**

Flame |Exclamation mark |Health Hazard |

#### **Pictograms**



**Hazard Statements:** 

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H360 May damage fertility or the unborn child.

**Precautionary statements** 

**Prevention:** 

P201 Obtain special instructions before use.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P281 Use personal protective equipment as required.

**Response:** 

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P370 + P378 In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry

chemical or carbon dioxide to extinguish.

#### 2.3. Other hazards

May cause drowsiness or dizziness.

# **SECTION 3: Composition/information on ingredients**

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt	
Methyl Ethyl Ketone	78-93-3	50 - 60	
VMCC Polymer	32650-26-3	15 - 25	
Thermoplastic Polyester	Trade Secret	15 - 25	
Toluene	108-88-3	< 1	

## **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### Inhalation:

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

#### Skin Contact:

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

#### **Eye Contact:**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

#### If Swallowed:

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

### 4.2. Most important symptoms and effects, both acute and delayed

Allergic skin reaction (redness, swelling, blistering, and itching). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness).

#### 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>	<b>Condition</b>
Aldehydes	<b>During Combustion</b>
Hydrocarbons	<b>During Combustion</b>
Carbon monoxide	<b>During Combustion</b>
Carbon dioxide	<b>During Combustion</b>
Hydrogen Chloride	<b>During Combustion</b>
Hydrogen Cyanide	<b>During Combustion</b>
Oxides of Nitrogen	<b>During Combustion</b>

#### 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. Do not handle until all safety precautions have been read and understood. 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. Use personal protective equipment (gloves, respirators, etc.) as required. 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. Store away from heat. Store away from acids. Store away from oxidizing agents.

# **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	<b>Additional Comments</b>
Toluene		108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human
					carcin, Ototoxicant
Toluene		108-88-3	Malaysia OELs	TWA(8 hours):188 mg/m3(50	SKIN
			-	ppm)	
Methyl Ethy	yl Ketone	78-93-3	ACGIH	TWA:200 ppm;STEL:300 ppm	
Methyl Ethy	yl Ketone	78-93-3	Malaysia OELs	TWA(8 hours):590	
	•		-	mg/m3(200 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:

Indirect Vented Goggles

## Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Polymer laminate

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

## Respiratory protection

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

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

Discost and chemical properties	T::1
Physical state	Liquid
Color	Colorless
Odor	Ketones
Odor threshold	No Data Available
рН	Not Applicable
Melting point/Freezing point	Not Applicable
Boiling point/Initial boiling point/Boiling range	>=80 °C [Details:MEK]
Flash Point	-8.9 °C [Test Method:Closed Cup] [Details:MEK]
Evaporation rate	2.7 [Ref Std:WATER=1]
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	1.8 % volume
Flammable Limits(UEL)	10 % volume
Vapor Pressure	<=12,132.3 Pa [@ 25 °C ]
Vapor Density and/or Relative Vapor Density	2.5 [ <i>Ref Std</i> :AIR=1]
Density	0.95 g/ml
Relative Density	0.95 [ <i>Ref Std</i> :WATER=1]
Water solubility	Slight (less than 10%)
Solubility- non-water	No Data Available
Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	404 °C
Decomposition temperature	No Data Available
Viscosity/Kinematic Viscosity	[6,500 - 10,500 mPa-s [@ 23 °C ]
Volatile Organic Compounds	
Percent volatile	55 - 65 % weight
VOC Less H2O & Exempt Solvents	<=561 g/l [Test Method:calculated SCAQMD rule 443.1]
Molecular weight	No Data Available
Solids Content	40 - 50 % weight

## **Nanoparticles**

This material does not contain nanoparticles.

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# **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

Strong oxidizing agents

#### 10.6. Hazardous decomposition products

Substance
None known.

**Condition** 

Refer to section 5.2 for hazardous decomposition products during combustion.

## **SECTION 11: Toxicological information**

The information below may not 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:**

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:**

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

## **Ingestion:**

May be harmful if swallowed.

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

#### Additional Health Effects:

#### Single exposure may cause target organ effects:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

## 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	Inhalation-		No data available; calculated ATE >50 mg/l
	Vapor(4 hr)		
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
Methyl Ethyl Ketone	Dermal	Rabbit	LD50 > 8,050 mg/kg
Methyl Ethyl Ketone	Inhalation-	Rat	LC50 34.5 mg/l
	Vapor (4		
	hours)		
Methyl Ethyl Ketone	Ingestion	Rat	LD50 2,737 mg/kg
Thermoplastic Polyester	Dermal		LD50 estimated to be > 5,000 mg/kg
Thermoplastic Polyester	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Toluene	Dermal	Rat	LD50 12,000 mg/kg
Toluene	Inhalation-	Rat	LC50 30 mg/l
	Vapor (4		
	hours)		
Toluene	Ingestion	Rat	LD50 5,550 mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value
Methyl Ethyl Ketone	Rabbit	Minimal irritation
Toluene	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
Methyl Ethyl Ketone	Rabbit	Severe irritant
Toluene	Rabbit	Moderate irritant

#### **Sensitization:**

## **Skin Sensitization**

Name	Species	Value
Toluene	Guinea	Not classified
Totache	pig	Tvot 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
Methyl Ethyl Ketone	In Vitro	Not mutagenic
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Methyl Ethyl Ketone	Inhalation	Human	Not carcinogenic
Toluene	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Toluene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Toluene	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification

# Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Methyl Ethyl Ketone	Inhalation	Not classified for development	Rat	LOAEL 8.8 mg/l	during gestation
Toluene	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.3 mg/l	1 generation
Toluene	Ingestion	Toxic to development	Rat	LOAEL 520 mg/kg/day	during gestation
Toluene	Inhalation	Toxic to development	Human	NOAEL Not available	poisoning and/or abuse

# Target Organ(s)

**Specific Target Organ Toxicity - single exposure** 

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Methyl Ethyl Ketone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	official classifica tion	NOAEL Not available	
Methyl Ethyl Ketone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Methyl Ethyl Ketone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
Methyl Ethyl Ketone	Ingestion	liver	Not classified	Rat	NOAEL Not available	not applicable
Methyl Ethyl Ketone	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 1,080 mg/kg	not applicable
Toluene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Toluene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Toluene	Inhalation	immune system	Not classified	Mouse	NOAEL 0.004 mg/l	3 hours
Toluene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse

**Specific Target Organ Toxicity - repeated exposure** 

Name Route Target Organ(s) Value	Species	Test Result	Exposure
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						Duration
Methyl Ethyl Ketone	Dermal	nervous system	Not classified	Guinea pig	NOAEL Not available	31 weeks
Methyl Ethyl Ketone	Inhalation	liver   kidney and/or bladder   heart   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   hematopoietic system   immune system   muscles	Not classified	Rat	NOAEL 14.7 mg/l	90 days
Methyl Ethyl Ketone	Ingestion	liver	Not classified	Rat	NOAEL Not available	7 days
Methyl Ethyl Ketone	Ingestion	nervous system	Not classified	Rat	NOAEL 173 mg/kg/day	90 days
Toluene	Inhalation	auditory system   eyes   olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Toluene	Inhalation	nervous system	May cause damage to organs though prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
Toluene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2.3 mg/l	15 months
Toluene	Inhalation	heart   liver   kidney and/or bladder	Not classified	Rat	NOAEL 11.3 mg/l	15 weeks
Toluene	Inhalation	endocrine system	Not classified	Rat	NOAEL 1.1 mg/l	4 weeks
Toluene	Inhalation	immune system	Not classified	Mouse	NOAEL Not available	20 days
Toluene	Inhalation	bone, teeth, nails, and/or hair	Not classified	Mouse	NOAEL 1.1 mg/l	8 weeks
Toluene	Inhalation	hematopoietic system   vascular system	Not classified	Human	NOAEL Not available	occupational exposure
Toluene	Inhalation	gastrointestinal tract	Not classified	Multiple animal species	NOAEL 11.3 mg/l	15 weeks
Toluene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 625 mg/kg/day	13 weeks
Toluene	Ingestion	heart	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	liver   kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	hematopoietic system	Not classified	Mouse	NOAEL 600 mg/kg/day	14 days
Toluene	Ingestion	endocrine system	Not classified	Mouse	NOAEL 105 mg/kg/day	28 days
Toluene	Ingestion	immune system	Not classified	Mouse	NOAEL 105 mg/kg/day	4 weeks

#### Aspiration Hazard

ľ	Name	Value					
	Toluene	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:

Not acutely toxic to aquatic life by GHS criteria.

## Chronic aquatic hazard:

Not chronically toxic to aquatic life by GHS criteria.

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
Methyl Ethyl	78-93-3	Activated	Experimental	12 hours	IC50	1,873 mg/l
Ketone		sludge	1			
Methyl Ethyl	78-93-3	Bacteria	Experimental	16 hours	NOEC	1,150 mg/l
Ketone			1			
Methyl Ethyl	78-93-3	Fathead	Experimental	96 hours	LC50	2,993 mg/l
Ketone		Minnow				
Methyl Ethyl	78-93-3	Green algae	Experimental	96 hours	EC50	2,029 mg/l
Ketone						
Methyl Ethyl	78-93-3	Water flea	Experimental	48 hours	EC50	308 mg/l
Ketone						
Methyl Ethyl	78-93-3	Green Algae	Experimental	96 hours	EC10	1,289 mg/l
Ketone						
Methyl Ethyl	78-93-3	Water flea	Experimental	21 days	NOEC	100 mg/l
Ketone						
Thermoplastic	Trade Secret		Data not			n/a
Polyester			available or			
			insufficient for			
	1		classification			
VMCC	32650-26-3		Data not			N/A
Polymer			available or			
			insufficient for			
	100.00.2		classification	0.61	7.050	"
Toluene	108-88-3	Coho Salmon	Experimental	96 hours	LC50	5.5 mg/l
Toluene	108-88-3	Grass Shrimp	Experimental	96 hours	LC50	9.5 mg/l
Toluene	108-88-3	Green Algae	Experimental	72 hours	EC50	12.5 mg/l
Toluene	108-88-3	Leopard frog	Experimental	9 days	LC50	0.39 mg/l
Toluene	108-88-3	Pink Salmon	Experimental	96 hours	LC50	6.41 mg/l
Toluene	108-88-3	Water flea	Experimental	48 hours	EC50	3.78 mg/l
Toluene	108-88-3	Coho Salmon	Experimental	40 days	NOEC	1.39 mg/l
Toluene	108-88-3	Diatom	Experimental	72 hours	NOEC	10 mg/l
Toluene	108-88-3	Water flea	Experimental	7 days	NOEC	0.74 mg/l
Toluene	108-88-3	Activated	Experimental	12 hours	IC50	292 mg/l
		sludge				
Toluene	108-88-3	Bacteria	Experimental	16 hours	NOEC	29 mg/l
Toluene	108-88-3	Bacteria	Experimental	24 hours	EC50	84 mg/l
Toluene	108-88-3	Redworm	Experimental	28 days	LC50	>150 mg per kg of
	<u> </u>					bodyweight
Toluene	108-88-3	Soil microbes	Experimental	28 days	NOEC	<26 mg/kg (Dry

l I			TTT 1 1 ()
			(Weight)
			( V C15111)

## 12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Methyl Ethyl	78-93-3	Experimental	28 days	Biological	98 %	OECD 301D - Closed
Ketone		Biodegradation		Oxygen	BOD/ThBOD	Bottle Test
				Demand		
Thermoplastic	Trade Secret	Data not			N/A	
Polyester		availbl-				
		insufficient				
VMCC	32650-26-3	Data not			N/A	
Polymer		availbl-				
		insufficient				
Toluene	108-88-3	Experimental		Photolytic half-	5.2 days (t 1/2)	
		Photolysis		life (in air)		
Toluene	108-88-3	Experimental	20 days	Biological	80 %	APHA Std Meth
		Biodegradation	_	Oxygen	BOD/ThBOD	Water/Wastewater
				Demand		

## 12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Methyl Ethyl	78-93-3	Experimental		Log of	0.29	Non-standard method
Ketone		Bioconcentrati		Octanol/H2O		
		on		part. coeff		
Thermoplastic	Trade Secret	Data not	N/A	N/A	N/A	N/A
Polyester		available or				
		insufficient for				
		classification				
VMCC	32650-26-3	Data not	N/A	N/A	N/A	N/A
Polymer		available or				
		insufficient for				
		classification				
Toluene	108-88-3	Experimental	72 hours	Bioaccumulatio	90	
		BCF - Other		n Factor		
Toluene	108-88-3	Experimental		Log of	2.73	
		Bioconcentrati		Octanol/H2O		
		on		part. coeff		

## 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 Technical Name: None assigned. Hazard Class/Division: 3
Subsidiary Risk: None assigned. Packing Group: II

Packing Group: II Limited Quantity: Yes

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 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 the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional 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 new substance notification requirements of CEPA. 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 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