

# 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.

This Safety Data Sheet has been prepared in accordance with the SS586 Specification for Hazard Communication for Hazardous Chemicals and Dangerous Goods.

**Document group:** 10-0381-3 **Version number:** 4.00

**Issue Date:** 29/08/2024 **Supersedes date:** 26/03/2024

# **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>™</sup> Hot Melt Adhesive 3762-AE, 3762-PG, 3762-TC, 3762-Q

#### **Product Identification Numbers**

62-3762-7230-8 62-3762-7232-4 62-3762-7233-2 62-3762-7234-0 62-3762-9132-4

62-3762-9330-4 62-3762-9531-7 62-3762-9830-3

#### 1.2. Recommended use and restrictions on use

#### Recommended use

Adhesive

### 1.3. Supplier's details

Address: 3M Technologies (S) Pte Ltd,10 Ang Mo Kio Street 65, Singapore 569059

**Telephone:** +65 6450 8888 **www.3m.com.sg** 

#### 1.4. Emergency telephone number

+65 6591 6601 (8.15am - 5.00pm, Monday - Friday)

# **SECTION 2: Hazard identification**

# 2.1. Classification of the substance or mixture

This product is not classified as hazardous per GHS criteria as implemented by Singapore Standard SS586: 2022.

# 2.2. Label elements

### SIGNAL WORD

Not applicable.

### **Symbols**

Not applicable

## **Pictograms**

Not applicable

# 2.3. Other hazards

May cause thermal burns. 3M Avoid contact with hot extruded material or applicator tip. Avoid direct eye exposure to vapours. 3M In case of skin contact with molten material, immediately flush with cold water and cover with a clean dressing. Do not attempt to remove adhesive. Have burn treated by a medical doctor.

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

This material is a mixture.

Ingredient	CAS Nbr	% by Wt
Ethylene-Vinyl Acetate Polymer	24937-78-8	40 - 60
Hydrocarbon resin	68478-07-9	20 - 40
Non-Volatile Compounds	Trade Secret	< 30
Polyolefin Wax	8002-74-2	1 - 20
Terpene polymer	31393-98-3	< 10
Synthetic Rosin Resin	Trade Secret	< 10
Chlorine	7782-50-5	< 0.005

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### Inhalation

No need for first aid is anticipated. If symptoms develop, remove the affected person to fresh air. Get medical attention.

#### Skin contact

Immediately flush skin with large amounts of cold water for at least 15 minutes. DO NOT ATTEMPT TO REMOVE MOLTEN MATERIAL. Cover affected area with a clean dressing. Get immediate medical attention.

#### Eye contact

Immediately flush eyes with large amounts of water for at least 15 minutes. DO NOT ATTEMPT TO REMOVE MOLTEN MATERIAL. Get immediate medical attention.

#### If swallowed

Do not induce vomiting. Rinse mouth. If you feel unwell, get medical attention.

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

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

# 4.3. Indication of any immediate medical attention and special treatment required

Not applicable

# **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

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

None inherent in this product.

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

SubstanceConditionAldehydes.During combustion.Carbon monoxide.During combustion.Carbon dioxide.During combustion.Toxic vapour, gas, particulate.During combustion.

n.... 2 . C . 11

#### 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

Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. 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 skin contact with hot material. For industrial/occupational use only. Not for consumer sale or use. Avoid release to the environment.

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

No special storage requirements.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

## Occupational exposure limits

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

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Chlorine	7782-50-5	ACGIH	TWA:0.1 ppm;STEL:0.4 ppm	A4: Not class. as human
				carcin
Chlorine	7782-50-5	Singapore PELs	TWA(8 hours):1.5 mg/m3(0.5	
			ppm);STEL(15 minutes):2.9	
			mg/m3(1 ppm)	
Polyolefin Wax	8002-74-2	ACGIH	TWA(as fume):2 mg/m3	
Polyolefin Wax	8002-74-2	Singapore PELs	TWA(as fume)(8 hours):2	
			mg/m3	
Non-Volatile Compounds	Trade	ACGIH	TWA(as Resin, inhalable	Dermal/Respiratory
	Secret		fraction):0.001 mg/m3	Sensitizer
Synthetic Rosin Resin	Trade	ACGIH	TWA(as Resin, inhalable	Dermal/Respiratory
	Secret		fraction):0.001 mg/m3	Sensitizer

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

Singapore PELs: Singapore. Workplace Safety and Health (Permissible Exposure Levels of Toxic Substances) Order

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

\_\_\_\_\_

# 8.2. Exposure controls

# 8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

## 8.2.2. Personal protective equipment (PPE)

# **Eye/face protection**

None required.

## Skin/hand protection

No chemical protective gloves are required.

## Respiratory protection

None required.

#### Thermal hazards

Wear heat insulating gloves, indirect vented goggles, and a full face shield when handling hot material to prevent thermal burns.

# **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

Information on basic physical and chemical properti	les
Physical state	Solid.
Specific Physical Form:	Waxy Solid
Color	Tan
Odor	Odorless
Odour threshold	No data available.
рН	Not applicable.
Melting point/Freezing point	No data available.
Boiling point/Initial boiling point/Boiling range	Not applicable.
Flash point	260 °C [ <i>Test Method:</i> Cleveland Open Cup] [ <i>Details:</i> Conditions: ASTM D-92-72]
Evaporation rate	Not applicable.
Flammability	Not applicable.
Flammable Limits(LEL)	Not applicable.
Flammable Limits(UEL)	Not applicable.
Vapor Density and/or Relative Vapor Density	Nil
Density	0.95 g/ml
Relative density	0.95 [Ref Std:WATER=1]
Water solubility	Nil
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Autoignition temperature	No data available.
Decomposition temperature	No data available.
Kinematic Viscosity	Not applicable.
Volatile organic compounds (VOC)	0 g/l [Test Method:calculated SCAQMD rule 443.1]
Percent volatile	0 % weight
VOC less H2O & exempt solvents	0 g/l [Test Method:calculated SCAQMD rule 443.1]
Molecular weight	No data available.
·	

Page: 4 of 11

3M<sup>TM</sup> Hot Melt Adhesive 3762-AE, 3762-PG, 3762-TC, 3762-Q

Solids content	100 %

Particle Characteristics Not applicable.

# **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

This material is considered to be non reactive under normal use conditions

# 10.2 Chemical stability

Stable.

### 10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

### 10.4 Conditions to avoid

None known.

# 10.5 Incompatible materials

None known.

### 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 labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

# 11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

## Inhalation

No health effects are expected.

### Skin contact

During heating: Thermal Burns: Signs/symptoms may include intense pain, redness and swelling, and tissue destruction.

#### Eye contact

During heating: Thermal Burns: Signs/symptoms may include severe pain, redness and swelling, and tissue destruction.

#### **Ingestion**

No known health effects.

# **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	Ingestion		No data available; calculated ATE >5,000 mg/kg
Ethylene-Vinyl Acetate Polymer	Dermal		LD50 estimated to be > 5,000 mg/kg
Ethylene-Vinyl Acetate Polymer	Ingestion	Rat	LD50 > 1,000 mg/kg
Hydrocarbon resin	Dermal	Rabbit	LD50 > 3,160 mg/kg
Hydrocarbon resin	Ingestion	Rat	LD50 > 5,000 mg/kg
Non-Volatile Compounds	Dermal	Rat	LD50 > 2,000 mg/kg
Non-Volatile Compounds	Ingestion	Rat	LD50 > 2,000 mg/kg
Polyolefin Wax	Dermal	Rat	LD50 > 5,000 mg/kg
Polyolefin Wax	Ingestion	Rat	LD50 > 5,000 mg/kg
Synthetic Rosin Resin	Dermal	Rabbit	LD50 > 2,500 mg/kg
Synthetic Rosin Resin	Ingestion	Rat	LD50 > 31,500 mg/kg
Terpene polymer	Dermal	Professio	LD50 estimated to be > 5,000 mg/kg
		nal	
		judgeme	
		nt	
Terpene polymer	Ingestion	Rat	LD50 > 2,000 mg/kg
Chlorine	Dermal		estimated to be > 5,000 mg/kg
Chlorine	Inhalation-		estimated to be > 12.5 mg/l
	Dust/Mist		
Chlorine	Inhalation-		estimated to be > 50 mg/l
	Vapor		
Chlorine	Ingestion		estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
Ethylene-Vinyl Acetate Polymer	Professio nal judgemen t	No significant irritation
Hydrocarbon resin	similar	No significant irritation
	compoun	
	ds	
Non-Volatile Compounds	Rabbit	No significant irritation
Polyolefin Wax	Rabbit	No significant irritation
Synthetic Rosin Resin	Rabbit	Minimal irritation
Terpene polymer	In vitro	No significant irritation
	data	

Serious Eve Damage/Irritation

Name	Species	Value
Ethylene-Vinyl Acetate Polymer	Professio nal judgemen t	No significant irritation
Hydrocarbon resin	similar	Mild irritant
	compoun	
	ds	
Non-Volatile Compounds	Rabbit	Mild irritant
Polyolefin Wax	Rabbit	No significant irritation
Synthetic Rosin Resin	Rabbit	Moderate irritant
Terpene polymer	In vitro	No significant irritation
	data	

# **Sensitization:**

#### **Skin Sensitisation**

Name	Species	Value
Non-Volatile Compounds	Human and animal	Not classified
Polyolefin Wax	Guinea pig	Not classified
Synthetic Rosin Resin	Guinea pig	Not classified
Terpene polymer	Multiple animal species	Not classified

# **Respiratory Sensitisation**

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

Germ Cell Mutagenicity

Name	Route	Value
Polyolefin Wax	In Vitro	Not mutagenic
Terpene polymer	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Polyolefin Wax	Ingestion	Rat	Not carcinogenic
Synthetic Rosin Resin	Ingestion	Rat	Not carcinogenic

# **Reproductive Toxicity**

# Reproductive and/or Developmental Effects

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

# Target Organ(s)

# Specific Target Organ Toxicity - single exposure

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

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Ethylene-Vinyl Acetate Polymer	Ingestion	liver	Not classified	Rat	NOAEL 4,000 mg/kg/day	90 days
Polyolefin Wax	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 15 mg/kg/day	90 days
Polyolefin Wax	Ingestion	hematopoietic system   liver   immune system   skin   endocrine system   bone, teeth, nails, and/or hair   muscles   nervous system   eyes   kidney and/or bladder   respiratory system   vascular system	Not classified	Rat	NOAEL 1,500 mg/kg/day	90 days
Synthetic Rosin Resin	Ingestion	hematopoietic	Not classified	Rat	NOAEL	90 days

		system   liver   kidney and/or bladder   heart   endocrine system   bone marrow   immune system   nervous system   respiratory system			1,000 mg/kg/day	
Terpene polymer	Ingestion	heart   gastrointestinal tract   hematopoietic system   liver   nervous system   eyes   kidney and/or bladder	Not classified	Rat	NOAEL 331 mg/kg/day	90 days

# **Aspiration Hazard**

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

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

# **SECTION 12: Ecological information**

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

## 12.1. Toxicity

## Acute aquatic hazard:

GHS Acute 3: Harmful to aquatic life.

#### **Chronic aquatic hazard:**

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

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Ethylene-Vinyl Acetate Polymer	24937-78-8	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Hydrocarbon resin	68478-07-9	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Non-Volatile Compounds	Trade Secret	Green algae	Estimated	72 hours	No tox obs at lmt of water sol	>100 mg/l
Non-Volatile Compounds	Trade Secret	Rainbow trout	Estimated	96 hours	No tox obs at lmt of water sol	>100 mg/l
Non-Volatile Compounds	Trade Secret	Water flea	Estimated	48 hours	No tox obs at lmt of water sol	>100 mg/l
Non-Volatile Compounds	Trade Secret	Green algae	Estimated	72 hours	No tox obs at lmt of water sol	>100 mg/l
Polyolefin Wax	8002-74-2	Green algae	Analogous Compound	96 hours	EC50	>1,000 mg/l
Polyolefin Wax	8002-74-2	Rainbow trout	Analogous Compound	96 hours	LC50	>1,000 mg/l
Polyolefin Wax	8002-74-2	Water flea	Analogous Compound	48 hours	EC50	>10,000 mg/l
Synthetic Rosin	Trade Secret	Fathead minnow	Analogous	96 hours	LC50	1.7 mg/l

Resin			Compound			
Synthetic Rosin Resin	Trade Secret	Green algae	Analogous Compound	72 hours	ErC50	39.6 mg/l
Synthetic Rosin Resin	Trade Secret	Water flea	Analogous Compound	48 hours	EC50	1.6 mg/l
Synthetic Rosin Resin	Trade Secret	Green algae	Analogous Compound	72 hours	NOEC	6.25 mg/l
Synthetic Rosin Resin	Trade Secret	Activated sludge	Analogous Compound	N/A	EC50	>10,000 mg/l
Terpene polymer	31393-98-3	Activated sludge	Experimental	3 hours	NOEC	1,000 mg/l
Terpene polymer	31393-98-3	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
Terpene polymer	31393-98-3	Water flea	Endpoint not reached	21 days	EL10	>100 mg/l
Chlorine	7782-50-5	Invertebrate	Experimental	48 hours	EC50	0.005 mg/l
Chlorine	7782-50-5	Invertebrate	Experimental	48 hours	EC50	0.00967 mg/l
Chlorine	7782-50-5	Rainbow trout	Experimental	96 hours	LC50	0.014 mg/l

# 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Ethylene-Vinyl Acetate Polymer	24937-78-8	Data not available- insufficient	N/A	N/A	N/A	N/A
Hydrocarbon resin	68478-07-9	Data not available- insufficient	N/A	N/A	N/A	N/A
Non-Volatile Compounds	Trade Secret	Experimental Biodegradation	28 days	CO2 evolution	47.3 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
Polyolefin Wax	8002-74-2	Analogous Compound Biodegradation	28 days	BOD	40 %BOD/ThOD	OECD 301F - Manometric respirometry
Synthetic Rosin Resin	Trade Secret	Analogous Compound Biodegradation	28 days	CO2 evolution	54 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
Synthetic Rosin Resin	Trade Secret	Analogous Compound Aquatic Inherent Biodegrad.	28 days	Dissolv. Organic Carbon Deplet	>73.3 %removal of DOC	OECD 302B Zahn- Wellens/EVPA
Terpene polymer	31393-98-3	Experimental Biodegradation	28 days	BOD	4 %BOD/ThOD	OECD 301D - Closed bottle test
Chlorine	7782-50-5	Data not available- insufficient	N/A	N/A	N/A	N/A

# 12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Ethylene-Vinyl Acetate Polymer	24937-78-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbon resin	68478-07-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Non-Volatile Compounds	Trade Secret	Estimated Bioconcentration		Bioaccumulation factor	7.4	
Polyolefin Wax	8002-74-2	Modeled Bioconcentration		Log Kow	10.2	Episuite <sup>TM</sup>
Synthetic Rosin Resin	Trade Secret	Modeled BCF - Fish		Bioaccumulation factor	≤32	Catalogic™

Page: 9 of 11

## 3M<sup>TM</sup> Hot Melt Adhesive 3762-AE, 3762-PG, 3762-TC, 3762-Q

Synthetic Rosin	Trade Secret	Experimental		Log Kow	>4.5	OECD 117 log Kow HPLC
Resin		Bioconcentration				method
Terpene polymer	31393-98-3	Experimental		Log Kow	7.41	
		Bioconcentration				
Chlorine	7782-50-5	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

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

# **SECTION 14: Transport Information**

#### **International Regulations**

**UN No.:** Not restricted for transport.

**UN Proper shipping name:** Not restricted for transport.

Transportation Class (IMO): None assigned Transportation Class (IATA): None assigned

Other Dangerous Goods Descriptions (IMO): None assigned Other Dangerous Goods Descriptions (IATA): None assigned

Packing Group: None assigned Marine pollutant: None assigned

# **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.

### This product may contain component(s) that are regulated by the following:

Workplace Safety and Health Act & Workplace Safety and Health (General Provisions) Regulations: this product is subject to

\_\_\_\_\_

## 3M<sup>TM</sup> Hot Melt Adhesive 3762-AE, 3762-PG, 3762-TC, 3762-Q

SDS, labelling, PEL and other requirements in the Act/Regulations.

Fire Safety (Petroleum and Flammable Materials) Regulations: This product is subject to the requirements in the Regulations Environmental Protection and Management (Hazardous Substances) Regulations: This product is subject to the requirements in the Regulations

# **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 Singapore SDSs are available at www.3m.com.sg