

# **Safety Data Sheet**

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This Safety Data Sheet has been prepared in accordance with the Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (Safe Work Australia, December 2011)

# **SECTION 1: Identification**

# 1.1. Product identifier

3M(TM) Hot Melt Adhesive 3764-AE, 3764-PG, 3764-TC, 3764-Q, 3764-B

 Product Identification
 Numbers

 62-3764-9132-0
 62-3764-9330-0
 62-3764-9335-9

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

# Recommended use

Hot-melt adhesive

For Industrial or Professional use only.

#### 1.3. Supplier's details

Address:3M Australia - Building A, 1 Rivett Road, North Ryde NSW 2113Telephone:136 136E Mail:productinfo.au@mmm.comWebsite:www.3m.com.au

## 1.4. Emergency telephone number

EMERGENCY: 1800 097 146 (Australia only)

# **SECTION 2: Hazard identification**

This product is NOT classified as a hazardous chemical according to the Model Work Health and Safety Regulations, 2011.

Refer to Section 14 of this Safety Data Sheets for product Dangerous Goods Classification.

# **2.1. Classification of the substance or mixture** Not applicable.

#### 2.2. Label elements

**Signal word** Not applicable.

### Symbols

Not applicable.

## Pictograms

Not applicable.

# **2.3. Other assigned/identified product hazards** May cause thermal burns.

# 2.4. Other hazards which do not result in classification

None known.

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

This material is a mixture.

Ingredient	CAS Nbr	% by Weight	
Ethylene-Vinyl Acetate Polymer	24937-78-8	50 - 65	
Naphtha (petroleum), light steam-cracked, debenzenised, polymers, hydrogenated	68132-00-3	15 - 40	
Hydrocarbon resin	Mixture	25 - 35	
Polyethylene Polymer	9006-26-2	1 - 10	
Polyolefin Wax	8002-74-2	1 - 10	
ETHYLENE VINYL ACETATE COPOLYMER	Trade Secret	5 - 10	
Antioxidant	6683-19-8	< 2	

# **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

#### Inhalation

No need for first aid is anticipated.

## 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

No need for first aid is anticipated.

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

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

# 5.1. Suitable extinguishing media

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

# **5.2. Special hazards arising from the substance or mixture** None inherent in this product.

## Hazardous Decomposition or By-Products

<u>Substance</u> Carbon monoxide. Carbon dioxide. <u>Condition</u> During combustion. During combustion.

# 5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

# **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

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. Observe precautions from other sections.

#### **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.

# **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Avoid skin contact with hot material. For industrial or professional use only.

## 7.2. Conditions for safe storage including any incompatibilities

Store away from heat.

# **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
Antioxidant	6683-19-8	CMRG	TWA:10 mg/m <sup>3</sup>	
Polyolefin Wax	8002-74-2	ACGIH	TWA(as fume):2 mg/m3	
Polyolefin Wax	8002-74-2	Australia OELs	TWA(as fume)(8 hours):2	
			mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

Australia OELs : Australia. Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment

CMRG : Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit CEIL: Ceiling

Sen: Sensitiser

Sk: Absorption through the skin may be a significant source of exposure.

#### 8.2. Exposure controls

#### 8.2.1. Engineering controls

No engineering controls required.

# 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: Full face shield. Indirect vented goggles.

Select and use eye protection in accordance with AS/NZS 1336. Eye protection should comply with the performance specifications of AS/NZS 1337.

### Skin/hand protection

No chemical protective gloves are required.

### **Respiratory protection**

None required.

### Thermal hazards

Wear heat insulating gloves when handling hot material to prevent thermal burns.

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

## 9.1. Information on basic physical and chemical properties

Physical state	Solid.				
Specific Physical Form:	Waxy Solid				
Appearance/Odour	Clear white, solid adhesive in rods or pellets, odourless. (Molten				
	state: resinous odour.)				
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	267.8 °C [Test Method:Cleveland Open Cup]				
	[Details: Conditions: ASTM D-92-72]				
Evaporation rate	Not applicable.				
Flammability (solid, gas)	Not classified				
Flammable Limits(LEL)	Not applicable.				
Flammable Limits(UEL)	Not applicable.				
Vapour pressure	Not applicable.				
Vapour density	Not applicable.				
Density	0.95 g/cm3				
Relative density	0.95 [ <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.				
Viscosity	Not applicable.				

Molecular weight Volatile organic compounds (VOC) Percent volatile VOC less H2O & exempt solvents Solids content No data available. 0 g/l [*Test Method*:calculated SCAQMD rule 443.1] 0 % weight 0 g/l [*Test Method*:calculated SCAQMD rule 443.1] 100 %

# **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. Conditions to avoid** None known.

**10.4. Possibility of hazardous reactions** Hazardous polymerisation will not occur.

**10.5 Incompatible materials** None known.

10.6 Hazardous decomposition products

Substance None known. **Condition** 

# **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 $> 5,000 \text{ mg/kg}$
Ethylene-Vinyl Acetate Polymer	Ingestion	Rat	LD50 > 1,000 mg/kg
Naphtha (petroleum), light steam- cracked, debenzenised, polymers, hydrogenated	Dermal		LD50 estimated to be > 5,000 mg/kg
Naphtha (petroleum), light steam- cracked, debenzenised, polymers, hydrogenated	Ingestion		LD50 estimated to be > 5,000 mg/kg
Hydrocarbon resin	Dermal	Rat	LD50 > 2,000  mg/kg
Hydrocarbon resin	Ingestion	Rat	LD50 > 5,000  mg/kg
Polyethylene Polymer	Dermal	Rabbit	LD50 > 7,940 mg/kg
Polyethylene Polymer	Ingestion	Rat	LD50 > 10,000 mg/kg
Polyolefin Wax	Dermal	Rat	LD50 > 5,000  mg/kg
Polyolefin Wax	Ingestion	Rat	LD50 > 5,000 mg/kg
Antioxidant	Dermal	Rabbit	LD50 > 3,160 mg/kg
Antioxidant	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1.95 mg/l
Antioxidant	Ingestion	Rat	LD50 > 10,250 mg/kg

ATE = acute toxicity estimate

## **Skin Corrosion/Irritation**

Name	Species	Value
Ethylene-Vinyl Acetate Polymer	Professional judgement	No significant irritation
Naphtha (petroleum), light steam-cracked,	Professional judgement	No significant irritation
debenzenised, polymers, hydrogenated		
Polyethylene Polymer	Rabbit	No significant irritation
Polyolefin Wax	Rabbit	No significant irritation
Antioxidant	Rabbit	No significant irritation

# Serious Eye Damage/Irritation

Name	Species	Value
Ethylene-Vinyl Acetate Polymer	Professional judgement	No significant irritation
Naphtha (petroleum), light steam-cracked,	Professional judgement	No significant irritation
debenzenised, polymers, hydrogenated		
Polyethylene Polymer	Rabbit	Mild irritant
Polyolefin Wax	Rabbit	No significant irritation
Antioxidant	Rabbit	Mild irritant

# **Skin Sensitisation**

Name	Species	Value
Polyolefin Wax	Guinea pig	Not sensitizing
Antioxidant	Human and animal	Not sensitizing

# **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
Antioxidant	In Vitro	Not mutagenic
Antioxidant	In vivo	Not mutagenic

## Carcinogenicity

Name	Route	Species	Value
Polyolefin Wax	Ingestion	Rat	Not carcinogenic
Antioxidant	Ingestion	Multiple animal	Not carcinogenic
		species	

## **Reproductive Toxicity**

# **Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	<b>Exposure Duration</b>
Antioxidant	Ingestion	Not toxic to female	Rat	NOAEL 688	2 generation
		reproduction		mg/kg/day	
Antioxidant	Ingestion	Not toxic to male	Rat	NOAEL 688	2 generation
		reproduction		mg/kg/day	
Antioxidant	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 1,000 mg/kg/day	during organogenesis

# 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	Some positive data exist, but the data are not sufficient for classification	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	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,500 mg/kg/day	90 days
Polyolefin Wax	Ingestion	skin   endocrine system   bone, teeth, nails, and/or hair   muscles   nervous system   eyes   kidney	All data are negative	Rat	NOAEL 1,500 mg/kg/day	90 days

		and/or bladder   respiratory system   vascular system				
Antioxidant	Ingestion	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 450 mg/kg/day	2 years
Antioxidant	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 302 mg/kg/day	90 days
Antioxidant	Ingestion	hematopoietic system   nervous system   kidney and/or bladder	All data are negative	Rat	NOAEL 2,500 mg/kg/day	90 days
Antioxidant	Ingestion	auditory system   eyes	All data are negative	Dog	NOAEL 302 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.

## **Exposure Levels**

Refer Section 8.1 Control Parameters of this Safety Data Sheet.

# Interactive Effects Not determined.

# **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:

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 Number	Organism	Туре	Exposure	Test endpoint	Test result
Ethylene-Vinyl	24937-78-8		Data not			
Acetate			available or			
Polymer			insufficient for			
			classification			
Polyolefin Wax	8002-74-2	Green algae	Experimental	96 hours	EC50	>1,000 mg/l
Polyolefin Wax	8002-74-2	Water flea	Experimental	48 hours	EC50	>10,000 mg/l
Polyolefin Wax	8002-74-2	Rainbow trout	Experimental	96 hours	LC50	>1,000 mg/l
Antioxidant	6683-19-8	Green algae	Experimental	72 hours	EC50	>100 mg/l

Antioxidant	6683-19-8	Green algae	Experimental	72 hours	NOEC	>100 mg/l
Polyethylene Polymer	9006-26-2		Data not available or insufficient for classification			
Hydrocarbon resin	Mixture		Data not available or insufficient for classification			
Naphtha (petroleum), light steam- cracked, debenzenised, polymers, hydrogenated	68132-00-3		Data not available or insufficient for classification			

# 12.2. Persistence and degradability

Material	CAS Number	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
Naphtha (petroleum), light steam- cracked, debenzenised, polymers, hydrogenated	68132-00-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polyethylene Polymer	9006-26-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbon resin	Mixture	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polyolefin Wax	8002-74-2	Estimated Biodegradation	28 days	BOD	40 % weight	OECD 301F - Manometric respirometry
Antioxidant	6683-19-8	Laboratory Biodegradation	28 days	CO2 evolution	5 % weight	OECD 301B - Modified sturm or CO2

# 12.3 : Bioaccumulative potential

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Ethylene-Vinyl	24937-78-8	Data not	N/A	N/A	N/A	N/A
Acetate		available or				
Polymer		insufficient for				
		classification				
Naphtha	68132-00-3	Data not	N/A	N/A	N/A	N/A
(petroleum),		available or				
light steam-		insufficient for				

cracked, debenzenised, polymers, hydrogenated		classification				
Polyethylene Polymer	9006-26-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbon resin	Mixture	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Antioxidant	6683-19-8	Laboratory BCF - Other	42 days	Bioaccumulatio n factor		OECD 305C-Bioaccum degree fish
Polyolefin Wax	8002-74-2	Estimated Bioconcentrati on		Log Kow	10.2	Estimated: Octanol- water partition coefficient

## 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. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

# **SECTION 14: Transport Information**

Australian Dangerous Goods Code (ADG) - Road/Rail Transport UN No.: Not applicable. Proper shipping name: Not applicable. Class/Division: Not applicable. Sub Risk: Not applicable. Packing Group: Not applicable.

Hazchem Code: Not applicable IERG: Not applicable.

#### International Air Transport Association (IATA) - Air Transport UN No.: Not applicable. Proper shipping name: Not applicable. Class/Division: Not applicable. Sub Risk: Not applicable. Packing Group: Not applicable.

## International Maritime Dangerous Goods Code (IMDG)- Marine Transport

UN No.: Not applicable. Proper shipping name: Not applicable. Class/Division: Not applicable. Sub Risk: Not applicable. Packing Group: Not applicable. Marine Pollutant: Not applicable.

# **SECTION 15: Regulatory information**

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Australian Inventory Status:

The chemical components contained within this product are listed on the Australian Inventory of Chemical Substances and are in compliance with the requirements of the Industrial Chemicals (Notification and Assessment) Act 1989 as amended.

**Poison Schedule:** This product is intended for Industrial or Professional Use only and therefore is not packaged and labelled in accordance with the requirements of the Standard for the Uniform Scheduling of Medicines and Poisons.

# **SECTION 16: Other information**

## **Revision information:**

Conversion to GHS format SDS.

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Greenguard ® is a United States based program. The 'Low VOC' reference related to United States Federal and State regulations exemptions for some solvents.

#### 3M Australia SDSs are available at www.3m.com.au