

## **Safety Data Sheet**

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 Document group:
 10-0388-8
 Version number:
 3.00

 Issue Date:
 22/11/2020
 Supersedes date:
 07/11/2017

This Safety Data Sheet has been prepared in accordance with the New Zealand, Hazardous Substances (Safety Data Sheets) Notice 2017.

# **SECTION 1: Identification**

#### 1.1. Product identifier

3M(TM) Hot Melt Adhesive 3738-Q

#### **Product Identification Numbers**

62-3738-9132-4

#### 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 New Zealand Ltd, 94 Apollo Drive, Rosedale 0632, Auckland

**Telephone:** (09) 477 4040

**E Mail:** innovation@nz.mmm.com

Website: 3m.co.nz

## 1.4. Emergency telephone number

24 hr Medical Emergency, National Poisons Centre, 0800 764 766 (0800 POISON)

## **SECTION 2: Hazard identification**

Classified as hazardous in accordance with the relevant criteria of the HSNO Act 1996, the Hazardous Substances (Classification) Notice 2017 and Hazardous Substances (Minimum Degrees of Hazard) Notice 2017. Refer to Section 14 of this Safety Data Sheet for product Dangerous Goods Classification.

### 2.1. Classification of the substance or mixture

GHS	HSNO
Chronic Aquatic Toxicity: Category 3	9.1C Aquatic toxicity (chronic)
Acute Aquatic Toxicity: Category 3	9.1D Aquatic toxicity (acute)

#### 2.2. Label elements

#### SIGNAL WORD

Not applicable.

#### **Symbols:**

Not applicable.

#### **HAZARD STATEMENTS:**

H412 Harmful to aquatic life with long lasting effects.

#### PRECAUTIONARY STATEMENTS

Disposal:

P501 Dispose of contents/container in accordance with applicable

local/regional/national/international regulations.

#### 2.3. Other hazards

May cause thermal burns.

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

Ingredient	CAS Nbr	% by Weight
Ethylene-Vinyl Acetate Polymer	24937-78-8	50 - 60
Hydrocarbon resin	68478-07-9	20 - 30
Synthetic Rosin Resin	Trade Secret	5 - 15
Polyolefin wax	Mixture	1 - 5

# **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 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.

#### **Eve 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 carbon dioxide or dry chemical extinguisher 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.

#### 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.

**5.4. Hazchem code:** Not applicable.

## **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**

Refer to Section 15 - Controls for more information

### 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. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

## 7.2. Conditions for safe storage including any incompatibilities

Store away from oxidising agents.

#### 7.3. Certified handler

Not required

# **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

Polyolefin wax Mixture ACGIH TWA(as fume):2 mg/m3
Polyolefin wax Mixture New Zealand TWA(as fume)(8 hours):2

WES mg/m3

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines New Zealand WES: New Zealand Workplace Exposure Standards.

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit ppm: parts per million mg/m³: milligrams per cubic metre

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

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.

Refer AS/NZS 1336 - Recommended practices for occupational eye protection and for performance specifications AS/NZS 1337, Parts 1 - 6 - Personal eye-protection.

## 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

normation on basic physical and encinear properties					
Physical state	Solid.				
Specific Physical Form:	Waxy Solid				
Colour	Tan				
Odour	Odourless				
Odour threshold	No data available.				
рН	No data available.				
Melting point/Freezing point	No data available.				
Boiling point/Initial boiling point/Boiling range	Not applicable.				
Flash point	287.8 °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.
Vapor Density and/or Relative Vapor Density	Not applicable.
Density	0.95 g/cm3
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	428.3 °C
<b>Decomposition temperature</b>	No data available.
Viscosity/Kinematic Viscosity	Not applicable.
Volatile organic compounds (VOC)	0 g/l [Test Method:calculated SCAQMD rule 443.1]
Percent volatile	
VOC less H2O & exempt solvents	0 g/l [Test Method:calculated SCAQMD rule 443.1]
Molecular weight	No data available.
Solids content	100 %

#### **Nanoparticles**

This material does not contain nanoparticles.

## **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 polymerisation will not occur.

## 10.4 Conditions to avoid

None known.

## 10.5 Incompatible materials

Strong oxidising 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 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
Synthetic Rosin Resin	Dermal	Rabbit	LD50 > 2,500  mg/kg
Synthetic Rosin Resin	Ingestion	Rat	LD50 > 31,500 mg/kg
Polyolefin wax	Dermal	Rat	LD50 > 5,000 mg/kg
Polyolefin wax	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species	Value
Ethylene-Vinyl Acetate Polymer	Professio	No significant irritation
	nal	
	judgemen	
	t	
Hydrocarbon resin	similar	No significant irritation
	compoun	
	ds	
Synthetic Rosin Resin	Rabbit	Minimal irritation
Polyolefin wax	Rabbit	No significant irritation

Serious Eve Damage/Irritation

Serious Eye Damage/III nation	~ .	T
Name	Species	Value
Ethylene-Vinyl Acetate Polymer	Professio	No significant irritation
	nal	
	judgemen	
	t	
Hydrocarbon resin	similar	Mild irritant
	compoun	
	ds	
Synthetic Rosin Resin	Rabbit	Moderate irritant
Polyolefin wax	Rabbit	No significant irritation

## **Sensitisation:**

#### **Skin Sensitisation**

Name	Species	Value
Synthetic Rosin Resin	Guinea	Not classified
	pig	
Polyolefin wax	Guinea	Not classified
	pig	

## **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

Carcinogenicity

Name	Route	Species	Value
Synthetic Rosin Resin	Ingestion	Rat	Not carcinogenic
Polyolefin wax	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
Synthetic Rosin Resin	Ingestion	hematopoietic system   liver   kidney and/or bladder   heart   endocrine system   bone marrow   immune system   nervous system   respiratory system	Not classified	Rat	NOAEL 1,000 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	Not classified	Rat	NOAEL 1,500 mg/kg/day	90 days

3M(TM) Hot Melt Adhesive 3738-AE, 3738-B, 3738-PG, 3738-Q, 3738-TC							
		system   vascular					

#### **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

## Ecotoxic to the aquatic environment.

Acute Aquatic Toxicity: Category 3 (HSNO 9.1D Aquatic toxicity) Chronic Aquatic Toxicity: Category 3 (HSNO 9.1C Aquatic toxicity)

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Ethylene-Vinyl	24937-78-8		Data not			
Acetate			available or			
Polymer			insufficient for			
			classification			
Hydrocarbon	68478-07-9		Data not			
resin			available or			
			insufficient for			
			classification			
Synthetic Rosin	Trade Secret	Fathead	Estimated	96 hours	LC50	1.7 mg/l
Resin		minnow				
Synthetic Rosin	Trade Secret	Green algae	Estimated	72 hours	EC50	39.6 mg/l
Resin						
Synthetic Rosin	Trade Secret	Water flea	Estimated	48 hours	EC50	1.6 mg/l
Resin						
Synthetic Rosin	Trade Secret	Green algae	Estimated	72 hours	NOEC	6.25 mg/l
Resin						
Polyolefin wax	Mixture	Green algae	Estimated	96 hours	EC50	>1,000 mg/l
Polyolefin wax	Mixture	Rainbow trout	Estimated	96 hours	LC50	>1,000 mg/l
Polyolefin wax	Mixture	Water flea	Estimated	48 hours	EC50	>10,000 mg/l

## 12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Ethylene-Vinyl	24937-78-8	Data not			N/A	
Acetate		availbl-				
Polymer		insufficient				
Hydrocarbon	68478-07-9	Data not			N/A	
resin		availbl-				
		insufficient				
Synthetic Rosin	Trade Secret	Estimated	28 days	CO2 evolution	56 % weight	OECD 301B - Modified

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Resin		Biodegradation				sturm or CO2
Polyolefin wax	Mixture	Estimated	28 days	BOD	40 % weight	OECD 301F -
		Biodegradation				Manometric
						respirometry

#### 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				
Hydrocarbon	68478-07-9	Data not	N/A	N/A	N/A	N/A
resin		available or				
		insufficient for				
		classification				
Synthetic Rosin	Trade Secret	Estimated		Bioaccumulatio	≤32	Estimated:
Resin		Bioconcentrati		n factor		Bioconcentration factor
		on				
Polyolefin wax	Mixture	Estimated		Log Kow	10.2	Estimated: Octanol-
		Bioconcentrati				water partition
		on				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

In accordance with the Hazardous Substances (Disposal) Notice 2017 and the relevant criteria of the HSNO Act 1996.

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.

Packaging (that may or may not contain any residual substance) may be lawfully disposed of by householders or other consumers through public or commercial waste collection services.

# **SECTION 14: Transport Information**

New Zealand Land Transport Rule: Dangerous Goods - 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**

HSNO Approval number HSR002670

Group standard name Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2017

HSNO Hazard classification Refer to Section 2: Hazard identification

#### NZ Inventory of Chemicals (NZIoC) Status

All applicable chemical ingredients in this material are in compliance with NZIoC listing requirements.

#### Controls in accordance with the Health and Safety at Work (Hazardous Substances) Regulations 2017

Certified handler Not required
Location Compliance Certificate Not required
Hazardous atmosphere zone Not required
Fire extinguishers Not required

Emergency response plan 1,000 L or 1,000 kg (for a HSNO 6.1D, 6.5A, 6.5B, 9.1B or 9.1C substance);

or 10,000 L or 10,000 kg (for a HSNO 6.6A, 6.8A, 6.9A, 8.3A, 9.1D

substance)

Secondary containment 1,000 L or 1,000 kg (for a HSNO 6.1D, 6.5A, 6.5B, 9.1B or 9.1C substance);

or 10,000 L or 10,000 kg (for a HSNO 6.6A, 6.8A, 6.9A, 8.3A, 9.1D

substance)

Tracking Not required

Warning signage 1,000 L or 1,000 kg (for a HSNO 8.3A, 9.1B or 9.1C substance); or 10,000 L

or 10,000 kg (for a HSNO 6.1D or 9.1D substance)

## **SECTION 16: Other information**

## **Revision information:**

Complete document review.

Document group:	10-0388-8	Version number:	3.00
Issue Date:	22/11/2020	Supersedes date:	07/11/2017

#### Key to abbreviations and acronyms

GHS means the Globally Harmonised System of Classification and Labelling of Chemicals, 5th revised edition 2013 HSNO means Hazardous Substances and New Organisms Act 1996

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date of issue. TO THE EXTENT

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