



Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the South African National Standard SANS 10234:2008.

SECTION 1: Identification

1.1. Product identifier

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

Product Identification Numbers

62-3738-9132-4

1.2. Recommended use and restrictions on use

Recommended use

Hot melt adhesive.

1.3. Supplier's details

Address: 3M South Africa (Pty) Ltd, Private Bag X926, Rivonia 2128
Telephone: 011 806 2000
E Mail: Not available.
Website: www.3m.co.za

1.4. Emergency telephone number

011 806 2000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Not classified as hazardous according to UN GHS criteria.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable.

2.3. Other hazards

May cause thermal burns.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Wt
Ethene, vinyl acetate copolymer	24937-78-8	50 - 70
Naphtha, light steam-cracked aromatic, piperylene concentrate, polymerised	68478-07-9	20 - 30
Synthetic Rosin Resin (NJTS Reg. No. 04499600-7068)	Trade Secret	5 - 15
Paraffin Wax	8002-74-2	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.

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 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

Substance

Carbon monoxide.

Carbon dioxide.

Condition

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

7.2. Conditions for safe storage including any incompatibilities

Store away from oxidising 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	CAS Nbr	Agency	Limit type	Additional comments
Paraffin Wax	8002-74-2	ACGIH	TWA(as fume):2 mg/m3	
Paraffin Wax	8002-74-2	South Africa RELs	TWA(as fume)(8 hours):2 mg/m3;STEL(as fume)(15 minutes):6 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

South Africa CLs : South Africa. Control Limits. Regulations for Hazardous Chemical Substances, Table 1

South Africa RELs : South Africa. Recommended Exposure Limits (RELs) Regulations for Hazardous Chemical Substances, Table 2

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

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.

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	medium tan, solid adhesive in rods, odourless. (Molten state: resinous odour.)
Odour threshold	<i>No data available.</i>
pH	<i>No data available.</i>
Melting point/Freezing point	<i>No data available.</i>
Boiling point/Initial boiling point/Boiling range	<i>Not applicable.</i>
Flash point	287.8 °C [Test Method:Cleveland Open Cup] [Details:Conditions: ASTM D-92-72]
Evaporation rate	<i>Not applicable.</i>
Flammability (solid, gas)	Not classified
Flammable Limits(LEL)	<i>Not applicable.</i>
Flammable Limits(UEL)	<i>Not applicable.</i>
Vapour pressure	<i>Not applicable.</i>
Vapour density	<i>Not applicable.</i>
Density	0.95 g/cm3
Relative density	0.95 [Ref Std:WATER=1]
Water solubility	Nil
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>No data available.</i>
Autoignition temperature	428.3 °C
Decomposition temperature	<i>No data available.</i>
Viscosity	<i>Not applicable.</i>
Volatile organic compounds (VOC)	0 g/l [Test Method:calculated SCAQMD rule 443.1]
VOC less H2O & exempt solvents	0 g/l [Test Method:calculated SCAQMD rule 443.1]
Solids content	100 %

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

Condition

None known.

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.

Contact with the skin during product use is not expected to result in significant irritation.

Eye contact

During heating:

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

Contact with the eyes during product use is not expected to result in significant irritation.

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
Ethene, vinyl acetate copolymer	Dermal		LD50 estimated to be > 5 000 mg/kg
Ethene, vinyl acetate copolymer	Ingestion	Rat	LD50 > 1 000 mg/kg
Naphtha, light steam-cracked aromatic, piperylene concentrate, polymerised	Dermal	Rabbit	LD50 > 3 160 mg/kg
Naphtha, light steam-cracked aromatic, piperylene concentrate, polymerised	Ingestion	Rat	LD50 > 5 000 mg/kg
Synthetic Rosin Resin (NJTS Reg. No. 04499600-7068)	Dermal	Rabbit	LD50 > 2 500 mg/kg

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Synthetic Rosin Resin (NJTS Reg. No. 04499600-7068)	Ingestion	Rat	LD50 > 31 500 mg/kg
Paraffin Wax	Dermal	Rabbit	LD50 > 5 000 mg/kg
Paraffin Wax	Ingestion	Rat	LD50 > 5 000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Ethene, vinyl acetate copolymer	Professional judgement	No significant irritation
Naphtha, light steam-cracked aromatic, piperylene concentrate, polymerised	similar compounds	No significant irritation
Synthetic Rosin Resin (NJTS Reg. No. 04499600-7068)	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
Ethene, vinyl acetate copolymer	Professional judgement	No significant irritation
Naphtha, light steam-cracked aromatic, piperylene concentrate, polymerised	similar compounds	Mild irritant
Synthetic Rosin Resin (NJTS Reg. No. 04499600-7068)	Rabbit	Moderate irritant

Skin Sensitisation

Name	Species	Value
Synthetic Rosin Resin (NJTS Reg. No. 04499600-7068)	Guinea pig	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

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

Carcinogenicity

Name	Route	Species	Value
Synthetic Rosin Resin (NJTS Reg. No. 04499600-7068)	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
Ethene, vinyl acetate copolymer	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 4 000 mg/kg/day	90 days

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Synthetic Rosin Resin (NJTS Reg. No. 04499600-7068)	Ingestion	hematopoietic system liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1 000 mg/kg/day	90 days
Synthetic Rosin Resin (NJTS Reg. No. 04499600-7068)	Ingestion	heart endocrine system bone marrow immune system nervous system respiratory system	All data are negative	Rat	NOAEL 1 000 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:

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 Nbr	Organism	Type	Exposure	Test endpoint	Test result
Synthetic Rosin Resin (NJTS Reg. No. 04499600-7068)	Trade Secret	Zebra Fish	Experimental	96 hours	LC50	5 mg/l
Synthetic Rosin Resin (NJTS Reg. No. 04499600-7068)	Trade Secret	Green Algae	Experimental	72 hours	EC50	>=18 mg/l
Synthetic Rosin Resin (NJTS Reg. No. 04499600-7068)	Trade Secret	Water flea	Experimental	48 hours	EC50	76 mg/l
Paraffin Wax	8002-74-2	Water flea	Experimental	48 hours	EC50	>10 000 mg/l
Paraffin Wax	8002-74-2	Rainbow trout	Experimental	96 hours	LC50	>1 000 mg/l
Paraffin Wax	8002-74-2	Green algae	Experimental	96 hours	EC50	>1 000 mg/l
Ethene, vinyl acetate copolymer	24937-78-8		Data not available or insufficient for			

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			classification			
Naphtha, light steam-cracked aromatic, piperylene concentrate, polymerised	68478-07-9		Data not available or insufficient for classification			

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Ethene, vinyl acetate copolymer	24937-78-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Naphtha, light steam-cracked aromatic, piperylene concentrate, polymerised	68478-07-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Paraffin Wax	8002-74-2	Estimated Biodegradation	28 days	BOD	40 % weight	OECD 301F - Manometric respirometry
Synthetic Rosin Resin (NJTS Reg. No. 04499600-7068)	Trade Secret	Experimental Biodegradation	29 days	CO2 evolution	0.95 % weight	OECD 301B - Modified sturm or CO2

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Naphtha, light steam-cracked aromatic, piperylene concentrate, polymerised	68478-07-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Ethene, vinyl acetate copolymer	24937-78-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Synthetic Rosin Resin (NJTS Reg. No. 04499600-7068)	Trade Secret	Experimental BCF - Rainbow Tr	10 days	Bioaccumulation factor	220	Other methods
Paraffin Wax	8002-74-2	Estimated Bioconcentration		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

Product must only be disposed of by an authorized/permitted waste disposal contractor or incinerated in an industrial or commercial facility in the presence of a combustible material.

SECTION 14: Transport Information

Compliance is required to South African Transport Information Road Traffic Act & Regulations and Railroad regulations, IATA Standards for airfreight and Maritime standards for ocean freight.

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 China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. 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. The components of this product are in compliance with the chemical notification requirements of TSCA.

SECTION 16: Other information

Revision information:

Label: GHS Classification information was modified.
Label: GHS Environmental Hazard Statements information was deleted.
Label: GHS Precautionary - Disposal information was deleted.
Label: Graphic information was added.
Label: Signal Word information was added.
Label: Symbol information was added.
Section 2: Ingredient table information was modified.
Section 7: Precautions safe handling information information was modified.
Section 11: Acute Toxicity table information was modified.
Section 11: Carcinogenicity Table information was modified.
Section 11: Reproductive and/or Developmental Effects text information was deleted.
Section 11: Reproductive Toxicity Table information was deleted.
Section 11: Serious Eye Damage/Irritation Table information was modified.
Section 11: Skin Corrosion/Irritation Table information was modified.
Section 11: Skin Sensitization Table information was modified.
Section 11: Specific Target Organ Toxicity - single exposure text information was added.
Section 11: Target Organs - Repeated Table information was modified.
Section 12: Acute aquatic hazard information information was modified.
Section 12: Chronic aquatic hazard information information was modified.
Section 12: Component ecotoxicity information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12: Bioaccumulative potential information information was modified.

Section 15: Regulations - Inventories information was modified.

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