

Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

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

Product Identification Numbers

62-3738-9132-4 62-3738-9330-4 62-3738-9531-7 62-3738-9830-3

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Hot melt adhesive.

1.3. Details of the supplier of the safety data sheet

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

Telephone: +44 (0)1344 858 000 **E Mail:** tox.uk@mmm.com **Website:** www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

This material is not classified as hazardous according to Regulation (EC) No. 1272/2008, as amended, on classification, labelling, and packaging of substances and mixtures.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

Not applicable

2.3. Other hazards

May cause thermal burns.

SECTION 3: Composition/information on ingredients

| Ingredient | CAS Nbr | EU Inventory | % by Wt | Classification |
|--|--------------|---------------------|---------|----------------|
| Ethene, vinyl acetate copolymer | 24937-78-8 | | 50 - 70 | |
| Naphtha, light steam-cracked aromatic, | 68478-07-9 | | 20 - 30 | |
| piperylene concentrate, polymerised | | | | |
| Synthetic Rosin Resin (NJTS Reg. No. | Trade Secret | | 5 - 15 | |
| 04499600-7068) | | | | |
| Paraffin Wax | 8002-74-2 | EINECS 232- | 1 - 5 | |
| | | 315-6 | | |

Please see section 16 for the full text of any H statements referred to in this section

Please refer to section 15 for any applicable Notas that have been applied to the above components

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

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. 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. Advice 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.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

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.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

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.

IngredientCAS NbrAgencyLimit typeAdditional commentsParaffin Wax8002-74-2UK HSCTWA(as fume):2

aranni wax 5002-74-2 OK 115C 1 wA(as func).2

mg/m3;STEL(as fume):6

mg/m3

UK HSC: UK Health and Safety Commission

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

CEIL: Ceiling

Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

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

Odour threshold

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.)
No data available.
No data available.
Not applicable.

Boiling point/boiling rangeNot applicable.Melting pointNo data available.Flammability (solid, gas)Not classifiedExplosive propertiesNot classifiedOxidising propertiesNot classified

Flash point 287.8 °C [Test Method: Cleveland Open Cup]

[Details: Conditions: ASTM D-92-72]

Autoignition temperature428.3 °CFlammable Limits(LEL)Not applicable.Flammable Limits(UEL)Not applicable.Vapour pressureNot applicable.

Relative density 0.95 [*Ref Std*:WATER=1]

Water solubility Nil

Solubility- non-water

Partition coefficient: n-octanol/water

Evaporation rate

Vapour density

Decomposition temperature

Viscosity

No data available.
Not applicable.
No data available.
No data available.
No data available.
Output

Not applicable.
Not applicable.
Output

Not applicable.

9.2. Other information

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 agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

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 |
| 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 |

 \overline{ATE} = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--|-----------|---------------------------|
| | | |
| Ethene, vinyl acetate copolymer | Professio | No significant irritation |
| | nal | |
| | judgemen | |
| | t | |
| Naphtha, light steam-cracked aromatic, piperylene concentrate, polymerised | similar | No significant irritation |
| | compoun | |
| | ds | |
| Synthetic Rosin Resin (NJTS Reg. No. 04499600-7068) | Rabbit | Minimal irritation |

Serious Eve Damage/Irritation

| Scrious Lyc Damage/Hittation | | |
|--|-----------|---------------------------|
| Name | Species | Value |
| | | |
| Ethene, vinyl acetate copolymer | Professio | No significant irritation |
| | nal | |
| | judgemen | |
| | t | |
| Naphtha, light steam-cracked aromatic, piperylene concentrate, polymerised | similar | Mild irritant |
| | compoun | |
| | ds | |
| 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 Not sensitising | | | | | | |
| Synthetic Rosin Resin (NJTS Reg. No. 04499600-7068) | Guinea Not sensitising | | | | | | |

Respiratory Sensitisation

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

Germ Cell Mutagenicity

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

Target Organ(s)

Specific Target Organ Toxicity - single exposure

For the component/components, either no data is currently available or the data is 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 |
| 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 is currently available or the data is 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 agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

| Material | CAS Nbr | Organism | Type | Exposure | Test endpoint | Test result |
|-----------------|--------------|-------------|--------------|----------|---------------|--------------|
| Synthetic Rosin | Trade Secret | Zebra Fish | Experimental | 96 hours | LC50 | 5 mg/l |
| Resin (NJTS | | | | | | |
| Reg. No. | | | | | | |
| 04499600- | | | | | | |
| 7068) | | | | | | |
| Synthetic Rosin | Trade Secret | Green Algae | Experimental | 72 hours | EC50 | >=18 mg/l |
| Resin (NJTS | | | | | | |
| Reg. No. | | | | | | |
| 04499600- | | | | | | |
| 7068) | | | | | | |
| Synthetic Rosin | Trade Secret | Water flea | Experimental | 48 hours | EC50 | 76 mg/l |
| Resin (NJTS | | | | | | |
| Reg. No. | | | | | | |
| 04499600- | | | | | | |
| 7068) | | | | | | |
| 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 | 24937-78-8 | | Data not | | | |
| acetate | | | available or | | | |
| copolymer | | | insufficient for | | | |
| | | | classification | | | |
| Naphtha, light | 68478-07-9 | | Data not | | | |
| steam-cracked | | | available or | | | |
| aromatic, | | | insufficient for | | | |
| piperylene | | | classification | | | |
| concentrate, | | | | | | |
| polymerised | | | | | | |

12.2. Persistence and degradability

| 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 |
| 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 |
| Paraffin Wax | 8002-74-2 | Estimated Bioconcentrati on | | Log Kow | 10.2 | Estimated: Octanol- water partition coefficient |
| Synthetic Rosin Resin (NJTS Reg. No. 04499600- | Trade Secret | Experimental BCF - Rainbow Tr | 10 days | Bioaccumulatio n factor | 220 | Other methods |

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| 7068) | | | | |
|----------|---|--|--|--|
| I /Unx i | 1 | | | |
| | | | | |
| | | | | |

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

See Section 11.1 Information on toxicological effects

This product has been classified as a non-hazardous waste. Prior to disposal, consult all applicable authorities and regulations to insure proper classification. 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.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

08 04 10 Waste adhesives and sealants other than those mentioned in 08 04 09
20 01 28 Paint, inks, adhesives and resins other than those mentioned in 20 01 27

SECTION 14: Transportation information

 $62\text{-}3738\text{-}9132\text{-}4, \quad 62\text{-}3738\text{-}9330\text{-}4, \quad 62\text{-}3738\text{-}9531\text{-}7, \quad 62\text{-}3738\text{-}9830\text{-}3$

Not hazardous for transportation

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.

15.2. Chemical Safety Assessment

Not applicable

SECTION 16: Other information

Revision information:

- Section 2.1: Classification information information was deleted.
- Section 3: Reference to H statement explanation in Section 016 information was added.
- Section 3: Reference to R and H statement explanation in Section 16 information was deleted.
- Section 3: Reference to section 15 for Nota info information was modified.
- Section 7: Precautions safe handling information information was modified.
- Section 11: Reproductive and/or Developmental Effects text information was deleted.
- Section 11: Reproductive Toxicity Table information was deleted.
- Section 11: Skin Sensitization Table information was modified.
- Section 11: Specific Target Organ Toxicity single exposure text information was added.
- Section 12: Component ecotoxicity information information was modified.
- Section 12: Persistence and Degradability information information was modified.
- Section 12:Bioccumulative potential information information was modified.
- Section 13: Standard Phrase Category Waste GHS information was modified.
- Section 15: Regulations Inventories information was modified.

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 United Kingdom MSDSs are available at www.3M.com/uk