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™ VHB™ Tape Universal Primer UV

Product Identification Numbers
70-0075-0487-4  70-0075-0502-0  70-0075-0505-3  70-0075-0506-1  70-0075-0507-9
7100107032  7100107033  7100116406  7100114901  7100114427

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

Identified uses
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:
Flammable Liquid, Category 2 - Flam. Liq. 2; H225
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Skin Sensitization, Category 1A - Skin Sens. 1A; H317
Aspiration Hazard, Category 1 - Asp. Tox. 1; H304
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336
Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411
2.2. Label elements
CLP REGULATION (EC) No 1272/2008

SIGNAL WORD
DANGER.

Symbols:
GHS02 (Flame) | GHS07 (Exclamation mark) | GHS08 (Health Hazard) | GHS09 (Environment)

Pictograms

Ingredients:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Nbr</th>
<th>EC No.</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>927-510-4</td>
<td>40 - 60</td>
<td></td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>79-20-9</td>
<td>201-185-2</td>
<td>30 - 50</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>108-31-6</td>
<td>203-571-6</td>
<td>&lt; 0.1</td>
</tr>
</tbody>
</table>

HAZARD STATEMENTS:

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H304 May be fatal if swallowed and enters airways.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:
P210A Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280E Wear protective gloves.

Response:
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P331 Do NOT induce vomiting.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.

Disposal:
P501 Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

For containers not exceeding 125 ml the following Hazard and Precautionary statements may be used:

<=125 ml Hazard statements
H317 May cause an allergic skin reaction.
H304 May be fatal if swallowed and enters airways.

<=125 ml Precautionary statements

Prevention:
P280E Wear protective gloves.

Response:
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P331 Do NOT induce vomiting.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.

3% of the mixture consists of components of unknown acute oral toxicity.
Contains 20% of components with unknown hazards to the aquatic environment.

2.3. Other hazards
None known.

SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Nbr</th>
<th>EC No.</th>
<th>REACH Registration No.</th>
<th>% by Wt</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>927-510-4</td>
<td>40 - 60</td>
<td>Aquatic Chronic 2, H411</td>
<td>Flam. Liq. 2, H225; Asp. Tox. 1, H304;</td>
<td>Skin Irrit. 2, H315; STOT SE 3, H336</td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>79-20-9</td>
<td>201-185-2</td>
<td>30 - 50</td>
<td>Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336; EUH066</td>
<td></td>
</tr>
<tr>
<td>Non-volatile polymeric components</td>
<td>Trade Secret</td>
<td></td>
<td>1 - 6</td>
<td>Substance not classified as hazardous</td>
<td></td>
</tr>
<tr>
<td>Tributyl o-acetylcitrate</td>
<td>77-90-7</td>
<td>201-067-0</td>
<td>&lt; 2</td>
<td>Substance not classified as hazardous</td>
<td></td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>108-31-6</td>
<td>203-571-6</td>
<td>&lt; 0.1</td>
<td>EUH071; Acute Tox. 4, H302; Skin Corr. 1B, H314; EUH071; Skin Sens. 1A, H317; STOT RE 1, H372</td>
<td></td>
</tr>
</tbody>
</table>

Note: Any entry in the EC# column that begins with the numbers 6, 7, 8, or 9 are a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance. Please see section 16 for the full text of any H statements referred to in this section

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 wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye contact
Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If swallowed
Do not induce vomiting. Get immediate medical attention.

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 fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture
Closed containers exposed to heat from fire may build pressure and explode.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon monoxide.</td>
<td>During combustion.</td>
</tr>
<tr>
<td>Carbon dioxide.</td>
<td>During combustion.</td>
</tr>
</tbody>
</table>

5.3. Advice for fire-fighters
Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. 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
Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. 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. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up
Contain spill. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent
material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. 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
Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapour accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

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.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Nbr</th>
<th>Agency</th>
<th>Limit type</th>
<th>Additional comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maleic anhydride</td>
<td>108-31-6</td>
<td>UK HSC</td>
<td>TWA: 1 mg/m³; STEL: 3 mg/m³</td>
<td>Respiratory Sensitizer</td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>79-20-9</td>
<td>UK HSC</td>
<td>TWA:616 mg/m³(200 ppm); STEL:770 mg/m³(250 ppm)</td>
<td></td>
</tr>
</tbody>
</table>

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.

**Recommended monitoring procedures:** Information on recommended monitoring procedures can be obtained from UK HSC

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. Use explosion-proof ventilation 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:
Indirect vented goggles.

Applicable Norms/Standards
Use eye protection conforming to EN 166

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.
Gloves made from the following material(s) are recommended:

<table>
<thead>
<tr>
<th>Material</th>
<th>Thickness (mm)</th>
<th>Breakthrough Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polymer laminate</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Applicable Norms/Standards
Use gloves tested to EN 374

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:
Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

Applicable Norms/Standards
Use a respirator conforming to EN 140 or EN 136: filter types A & P

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Physical state</th>
<th>Colour</th>
<th>Specific Physical Form:</th>
<th>Odor</th>
<th>Odour threshold</th>
</tr>
</thead>
</table>
### pH
Not applicable.

### Boiling point/boiling range
54.4 ºC [Details: Methyl acetate]

### Melting point
Not applicable.

### Flammability (solid, gas)
Not applicable.

### Explosive properties
Not classified

### Oxidising properties
Not classified

### Flash point
-10 ºC

### Autoignition temperature
No data available.

### Flammable Limits (LEL)
1.2 % [Details: Heptane]

### Flammable Limits (UEL)
16 % [Details: Methyl Acetate]

### Vapour pressure
No data available.

### Relative density
0.82 [at 25 ºC] [Ref Std: WATER=1]

### Water solubility
<=0.5 % [Details: approximately]

### Solubility - non-water
No data available.

### Partition coefficient: n-octanol/water
No data available.

### Evaporation rate
No data available.

### Vapour density
No data available.

### Decomposition temperature
No data available.

### Viscosity
25 mPa-s [at 25 ºC]

### Density
0.82 g/ml

### Viscoelasticity
25 mPa-s [at 25 ºC]

**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
Heat.
Sparks and/or flames.

#### 10.5 Incompatible materials
Strong oxidising agents.

#### 10.6 Hazardous decomposition products

<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>None known.</td>
<td></td>
</tr>
</tbody>
</table>

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**
May be harmful if inhaled. Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

**Skin contact**
Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, dryness, cracking, blistering, and pain. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

**Eye contact**
Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

**Ingestion**
Chemical (aspiration) pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish coloured skin (cyanosis), and may be fatal. Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

**Additional Health Effects:**

**Single exposure may cause target organ effects:**
Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

**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

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall product</td>
<td>Dermal</td>
<td></td>
<td>No data available; calculated ATE &gt;5,000 mg/kg</td>
</tr>
<tr>
<td>Overall product Inhalation-Vapour(4 hr)</td>
<td>No data available; calculated ATE20 - 50 mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall product Ingestion</td>
<td></td>
<td></td>
<td>No data available; calculated ATE &gt;5,000 mg/kg</td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>Dermal Rabbit</td>
<td>LD50 &gt; 2,920 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>Dermal Rabbit</td>
<td>LD50 &gt; 3,160 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>Dermal Rat</td>
<td>LD50 &gt; 2,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics Inhalation-Vapour (4 hours)</td>
<td>Rat</td>
<td>LC50 &gt; 14.7 mg/l</td>
<td></td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics Inhalation-Vapour (4 hours)</td>
<td>Rat</td>
<td>LC50 &gt; 23.3 mg/l</td>
<td></td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics Inhalation-Vapour (4 hours)</td>
<td>Rat</td>
<td>LC50 &gt; 5.61 mg/l</td>
<td></td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics Ingestion</td>
<td>Rat</td>
<td>LD50 &gt; 5,840 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics Ingestion</td>
<td>Rat</td>
<td>LD50 &gt; 5,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Methyl acetate Dermal</td>
<td>Rat</td>
<td>LD50 &gt; 2,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Methyl acetate</strong> Inhalation-</td>
<td>Rat</td>
<td>LC50 &gt; 49 mg/l</td>
<td></td>
</tr>
</tbody>
</table>
### Skin Corrosion/Irritation

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>Rabbit</td>
<td>Irritant</td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>Rabbit</td>
<td>No significant irritation</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>Human and animal</td>
<td>Corrosive</td>
</tr>
</tbody>
</table>

### Serious Eye Damage/Irritation

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>Rabbit</td>
<td>No significant irritation</td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>Rabbit</td>
<td>Mild irritant</td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>Rabbit</td>
<td>Moderate irritant</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>Rabbit</td>
<td>Corrosive</td>
</tr>
</tbody>
</table>

### Skin Sensitisation

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>Guinea pig</td>
<td>Not classified</td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>Human</td>
<td>Not classified</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>Multiple animal species</td>
<td>Sensitising</td>
</tr>
</tbody>
</table>

### Respiratory Sensitisation

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maleic anhydride</td>
<td>Human</td>
<td>Sensitising</td>
</tr>
</tbody>
</table>

### Germ Cell Mutagenicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>In Vitro</td>
<td>Not mutagenic</td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>In Vitro</td>
<td>Not mutagenic</td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>In vivo</td>
<td>Not mutagenic</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>In Vitro</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>In Vitro</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
</tr>
</tbody>
</table>

### Carcinogenicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>Inhalation</td>
<td>Mouse</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
</tr>
</tbody>
</table>

### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

ATE = acute toxicity estimate
<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Value</th>
<th>Species</th>
<th>Test result</th>
<th>Exposure Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>Not specified</td>
<td>Not classified for female reproduction</td>
<td>Rat</td>
<td>NOAEL Not available</td>
<td>2 generation</td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>Not specified</td>
<td>Not classified for male reproduction</td>
<td>Rat</td>
<td>NOAEL Not available</td>
<td>2 generation</td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>Not specified</td>
<td>Not classified for development</td>
<td>Rat</td>
<td>NOAEL Not available</td>
<td>2 generation</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>Ingestion</td>
<td>Not classified for female reproduction</td>
<td>Rat</td>
<td>NOAEL 55 mg/kg/day</td>
<td>2 generation</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>Ingestion</td>
<td>Not classified for male reproduction</td>
<td>Rat</td>
<td>NOAEL 55 mg/kg/day</td>
<td>2 generation</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>Ingestion</td>
<td>Not classified for development</td>
<td>Rat</td>
<td>NOAEL 140 mg/kg/day</td>
<td>during organogenesis</td>
</tr>
</tbody>
</table>

**Target Organ(s)**

### Specific Target Organ Toxicity - single exposure

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Target Organ(s)</th>
<th>Value</th>
<th>Species</th>
<th>Test result</th>
<th>Exposure Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>Inhalation</td>
<td>central nervous system depression</td>
<td>May cause drowsiness or dizziness</td>
<td>Human and animal</td>
<td>NOAEL Not available</td>
<td></td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>Inhalation</td>
<td>central nervous system depression</td>
<td>May cause drowsiness or dizziness</td>
<td>Human</td>
<td>NOAEL Not available</td>
<td></td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>Inhalation</td>
<td>respiratory irritation</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
<td>similar health hazards</td>
<td>NOAEL Not available</td>
<td></td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>Inhalation</td>
<td>respiratory irritation</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
<td>Human and animal</td>
<td>NOAEL Not available</td>
<td></td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>Inhalation</td>
<td>central nervous system depression</td>
<td>May cause drowsiness or dizziness</td>
<td>Human and animal</td>
<td>NOAEL Not available</td>
<td></td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>Inhalation</td>
<td>central nervous system depression</td>
<td>May cause drowsiness or dizziness</td>
<td>Human and animal</td>
<td>NOAEL Not available</td>
<td></td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>Inhalation</td>
<td>respiratory irritation</td>
<td>May cause respiratory irritation</td>
<td>Human and animal</td>
<td>NOAEL Not available</td>
<td></td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>Inhalation</td>
<td>blindness</td>
<td>Not classified</td>
<td>Human and animal</td>
<td>NOAEL Not available</td>
<td></td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>Ingestion</td>
<td>central nervous system depression</td>
<td>May cause drowsiness or dizziness</td>
<td>Human and animal</td>
<td>NOAEL Not available</td>
<td></td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>Inhalation</td>
<td>respiratory irritation</td>
<td>May cause respiratory irritation</td>
<td>Human</td>
<td>NOAEL Not available</td>
<td></td>
</tr>
</tbody>
</table>

### Specific Target Organ Toxicity - repeated exposure

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Target Organ(s)</th>
<th>Value</th>
<th>Species</th>
<th>Test result</th>
<th>Exposure Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl acetate</td>
<td>Inhalation</td>
<td>respiratory system</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
<td>Rat</td>
<td>NOAEL 1.1 mg/l</td>
<td>28 days</td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>Inhalation</td>
<td>endocrine system</td>
<td>hematopoietic system</td>
<td>liver</td>
<td>immune system</td>
<td>kidney and/or bladder</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>Inhalation</td>
<td>respiratory system</td>
<td>Causes damage to organs through prolonged or repeated exposure</td>
<td>Rat</td>
<td>LOAEL 0.0011 mg/l</td>
<td>6 months</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>Inhalation</td>
<td>endocrine system</td>
<td>hematopoietic system</td>
<td>nervous system</td>
<td>kidney</td>
<td>Not classified</td>
</tr>
</tbody>
</table>
Maleic anhydride | Ingestion | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 55 mg/kg/day | 80 days

Maleic anhydride | Ingestion | liver | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 250 mg/kg/day | 183 days

Maleic anhydride | Ingestion | heart | nervous system | Not classified | Rat | NOAEL 600 mg/kg/day | 183 days

Maleic anhydride | Ingestion | gastrointestinal tract | Not classified | Rat | NOAEL 150 mg/kg/day | 80 days

Maleic anhydride | Ingestion | hematopoietic system | Not classified | Dog | NOAEL 60 mg/kg/day | 90 days

Maleic anhydride | Ingestion | skin | endocrine system | immune system | eyes | respiratory system | Not classified | Rat | NOAEL 150 mg/kg/day | 80 days

### Aspiration Hazard

<table>
<thead>
<tr>
<th>Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>Aspiration hazard</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS #</th>
<th>Organism</th>
<th>Type</th>
<th>Exposure</th>
<th>Test endpoint</th>
<th>Test result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>927-510-4</td>
<td>Fathead minnow</td>
<td>Estimated</td>
<td>96 hours</td>
<td>Lethal Level 50%</td>
<td>&gt;8.2 mg/l</td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>927-510-4</td>
<td>Green Algae</td>
<td>Estimated</td>
<td>72 hours</td>
<td>Effect Level 50%</td>
<td>&gt;5.1 mg/l</td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>927-510-4</td>
<td>Green Algae</td>
<td>Estimated</td>
<td>72 hours</td>
<td>Effect Level 50%</td>
<td>&gt;29 mg/l</td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>927-510-4</td>
<td>Water flea</td>
<td>Estimated</td>
<td>48 hours</td>
<td>Effect Level 50%</td>
<td>&gt;5 mg/l</td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>927-510-4</td>
<td>Water flea</td>
<td>Estimated</td>
<td>48 hours</td>
<td>Effect Level 50%</td>
<td>&gt;4.5 mg/l</td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>927-510-4</td>
<td>Rainbow trout</td>
<td>Experimental</td>
<td>96 hours</td>
<td>Lethal Level 50%</td>
<td>&gt;13.4 mg/l</td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>927-510-4</td>
<td>Data not available or insufficient for classification</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>927-510-4</td>
<td>Green Algae</td>
<td>Estimated</td>
<td>72 hours</td>
<td>No obs Effect Level</td>
<td>&gt;0.5 mg/l</td>
</tr>
<tr>
<td>Material</td>
<td>CAS Nbr</td>
<td>Test type</td>
<td>Duration</td>
<td>Study Type</td>
<td>Test result</td>
<td>Protocol</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
<td>-----------</td>
<td>----------</td>
<td>------------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>927-510-4</td>
<td>Estimated Biodegradation</td>
<td>28 days</td>
<td>BOD</td>
<td>98 %BOD/CO D</td>
<td>OECD 301F - Manometric respirometry</td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>927-510-4</td>
<td>Data not available or insufficient</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>927-510-4</td>
<td>Estimated Biodegradation</td>
<td>28 days</td>
<td>BOD</td>
<td>77 % BOD/ThBOD</td>
<td>OECD 301F - Manometric respirometry</td>
</tr>
<tr>
<td>Methyl acetate</td>
<td>79-20-9</td>
<td>Experimental Biodegradation</td>
<td>28 days</td>
<td>BOD</td>
<td>70 % weight</td>
<td>OECD 301D - Closed bottle test</td>
</tr>
<tr>
<td>Non-volatile polymeric components</td>
<td>Trade Secret</td>
<td>Data not available or insufficient</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Tributyl o-acetylcitrate</td>
<td>77-90-7</td>
<td>Experimental Biodegradation</td>
<td>28 days</td>
<td>BOD</td>
<td>48 % weight</td>
<td>Other methods</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>108-31-6</td>
<td>Experimental Hydrolysis</td>
<td>25 days</td>
<td>CO2 evolution</td>
<td>&gt;90 % weight</td>
<td>OECD 301B - Modified sturm or CO2</td>
</tr>
</tbody>
</table>

### 12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS Nbr</th>
<th>Test type</th>
<th>Duration</th>
<th>Study Type</th>
<th>Test result</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics</td>
<td>927-510-4</td>
<td>Data not available or insufficient for classification</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### 12.3 : Bioaccumulative potential
12.4. Mobility in soil
Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment
This material does not contain any substances that are assessed to be a PBT or vPvB

12.6. Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Dispose of contents/container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal facility. 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.

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 09* Waste adhesives and sealants containing organic solvents or other dangerous substances

SECTION 14: Transportation information

70-0075-0487-4, 70-0075-0502-0

IMDG-CODE: UN1993, FLAMMABLE LIQUID, N.O.S., (HEPTANE), (METHYL ACETATE), 3., II . IMDG-Code segregation code: NONE, EMS: FE,SE.
ICAO/IATA: UN1993, FLAMMABLE LIQUID, N.O.S., (HEPTANE), (METHYL ACETATE), 3., II .
70-0075-0505-3, 70-0075-0506-1, 70-0075-0507-9
IMDG-CODE: UN1993, FLAMMABLE LIQUID, N.O.S., (HEPTANE), (METHYL ACETATE), 3., II , IMDG-Code segregation code: NONE, LIMITED QUANTITY, EMS: FE,SE.
ICAO/IATA: UN1993, FLAMMABLE LIQUID, N.O.S., (HEPTANE), (METHYL ACETATE), 3., II .

SECTION 15: Regulatory information

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

15.2. Chemical Safety Assessment
A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended.

SECTION 16: Other information

List of relevant H statements

EUH066 Repeated exposure may cause skin dryness or cracking.
EUH071 Corrosive to the respiratory tract.
H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H336 May cause drowsiness or dizziness.
H372 Causes damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Revision information:
Section 2: <125ml Hazard - Health information was modified.
Section 2: <125ml Precautionary - Prevention information was added.
Section 2: <125ml Precautionary - Response information was modified.
CLP: Ingredient table information was modified.
Label: CLP Classification information was modified.
Label: CLP Environmental Hazard Statements information was added.
Label: CLP Percent Unknown information was modified.
Label: CLP Precautionary - Disposal information was added.
Label: CLP Precautionary - Prevention information was modified.
Label: CLP Precautionary - Response information was modified.
Label: Graphic information was modified.
Section 3: Composition/ Information of ingredients table information was modified.
Section 7: Precautions safe handling information information was modified.
Section 8: Occupational exposure limit table information was modified.
Section 8: Personal Protection - Skin/body information information was added.
Section 8: Skin protection - protective clothing information information was added.
Section 09: Color information was added.
Section 9: Flash point information information was modified.
Section 09: Odor information was added.
Sections 3 and 9: Odour, colour, grade information information was deleted.
Section 11: Acute Toxicity table information was modified.
Section 11: Aspiration Hazard Table information was modified.
Section 11: Carcinogenicity Table information was added.
Section 11: Carcinogenicity text information was deleted.
Section 11: Germ Cell Mutagenicity Table information was modified.
Section 11: Health Effects - Skin information information was modified.
Section 11: Reproductive Toxicity Table information was added.
Section 11: Respiratory Sensitization Table information was added.
Section 11: Respiratory Sensitization text 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 deleted.
Section 11: Target Organs - Repeated Table information was modified.
Section 11: Target Organs - Single Table information was modified.
Section 12: Component ecotoxicity information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12: Biocaccumulative potential information information was modified.
Section 15: Regulations - Inventories information was deleted.
Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. 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