Safety Data Sheet

Copyright, 2021, 3M Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

Document Group: 36-3452-4
Issue Date: 06/02/21
Version Number: 2.11
Supercedes Date: 06/02/21

SECTION 1: Identification

1.1. Product identifier
3M™ VHB™ Tape Universal Primer UV

Product Identification Numbers
LA-D100-3025-8, 70-0075-0487-4, 70-0075-0502-0, 70-0075-0505-3, 70-0075-0506-1, 70-0075-0507-9, 70-0075-0508-7
7100116407, 7100107032, 7100107033, 7100116406, 7100114901, 7100114427

1.2. Recommended use and restrictions on use

Recommended use
Adhesion Promoter

1.3. Supplier’s details

MANUFACTURER: 3M
DIVISION: Industrial Adhesives and Tapes Division
ADDRESS: 3M Center, St. Paul, MN  55144-1000, USA
Telephone: 1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number
1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

2.1. Hazard classification
Flammable Liquid: Category 2.
Serious Eye Damage/Irritation: Category 2B.
Skin Corrosion/Irritation: Category 2.
Skin Sensitizer: Category 1A.
Aspiration Hazard: Category 1.
Specific Target Organ Toxicity (single exposure): Category 3.

2.2. Label elements
Signal word
Danger

Symbols
Flame | Exclamation mark | Health Hazard |
Pictograms

Hazard Statements
Highly flammable liquid and vapor.
Causes eye irritation.
Causes skin irritation.
May cause an allergic skin reaction.
May be fatal if swallowed and enters airways.
May cause respiratory irritation.
May cause drowsiness or dizziness.

Precautionary Statements

Prevention:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Keep container tightly closed.
Use explosion-proof electrical/ventilating/lighting equipment.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves and eye/face protection.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.

Response:
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
If eye irritation persists: Get medical advice/attention.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Do NOT induce vomiting.
Call a POISON CENTER or doctor/physician if you feel unwell.
In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:
Keep cool.
Keep container tightly closed.
Store locked up in a well-ventilated place.

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

4% of the mixture consists of ingredients of unknown acute oral toxicity.
5% of the mixture consists of ingredients of unknown acute dermal toxicity.  
4% of the mixture consists of ingredients of unknown acute inhalation toxicity.

### SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane, branched, cyclic and linear</td>
<td>426260-76-6</td>
<td>40 - 60</td>
</tr>
<tr>
<td>Methyl Acetate</td>
<td>79-20-9</td>
<td>30 - 50</td>
</tr>
<tr>
<td>Non-Volatile Polymeric Components (NJTS Reg. No. 04499600-7412)</td>
<td>Trade Secret*</td>
<td>1 - 6</td>
</tr>
<tr>
<td>Citric Acid, Tributyl Ester, Acetate</td>
<td>77-90-7</td>
<td>&lt; 2</td>
</tr>
<tr>
<td>Dimethylcyclopentane</td>
<td>2532-58-3</td>
<td>&lt; 2</td>
</tr>
<tr>
<td>Maleic Anhydride</td>
<td>108-31-6</td>
<td>&lt; 0.1</td>
</tr>
</tbody>
</table>

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

### 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

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain). Allergic skin reaction (redness, swelling, blistering, and itching). Aspiration pneumonitis (coughing, gasping, choking, burning of the mouth, and difficulty breathing). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness).

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

Not applicable.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for 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.

**Hazardous Decomposition or By-Products**
### 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 vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors 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 dikes 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 that is resistant to polar solvents. 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 authorized person. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. 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

#### 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/vapors/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 oxidizing 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 vapor 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

### 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>C.A.S. No.</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>ACGIH</td>
<td>TWA (inhalable fraction and vapor): 0.01 mg/m³</td>
<td>A4: Not class. as human carcin, Dermal/Respiratory Sensitizer</td>
</tr>
<tr>
<td>Maleic Anhydride</td>
<td>108-31-6</td>
<td>OSHA</td>
<td>TWA: 1 mg/m³ (0.25 ppm)</td>
<td></td>
</tr>
<tr>
<td>Methyl Acetate</td>
<td>79-20-9</td>
<td>ACGIH</td>
<td>TWA: 200 ppm; STEL: 250 ppm</td>
<td></td>
</tr>
<tr>
<td>Methyl Acetate</td>
<td>79-20-9</td>
<td>OSHA</td>
<td>TWA: 610 mg/m³ (200 ppm)</td>
<td></td>
</tr>
</tbody>
</table>

ACGIH : American Conference of Governmental Industrial Hygienists  
AIHA : American Industrial Hygiene Association  
CMRG : Chemical Manufacturer’s Recommended Guidelines  
OSHA : United States Department of Labor - Occupational Safety and Health Administration  
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/vapors/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

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: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (e.g. 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 vapors and particulates

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

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties

**Appearance**
- Physical state: Liquid
- Color: Colorless

**Specific Physical Form:**
- Liquid

**Odor**
- Solvent

**Odor threshold**
- No Data Available

**pH**
- 4.4

**Melting point**
- Not Applicable

**Boiling Point**
- 61.9 °C [@ 760 mmHg]

**Flash Point**
- 14 °F [Test Method: Closed Cup]

**Evaporation rate**
- No Data Available

**Flammability (solid, gas)**
- Not Applicable

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

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

**Vapor Pressure**
- 152.4 mmHg [@ 20 °C]

**Vapor Density**
- No Data Available

**Density**
- 0.77 g/ml [@ 23 °C]

**Specific Gravity**
- 0.77  [@ 23 °C] [Ref Std: WATER=1]

**Solubility In Water**
- 23 % [@ 23 °C]

**Solubility- non-water**
- No Data Available

**Partition coefficient: n-octanol/ water**
- No Data Available

**Autoignition temperature**
- No Data Available

**Decomposition temperature**
- No Data Available

**Viscosity**
- 1.9 centipoise [@ 23.5 °C ]

**Hazardous Air Pollutants**
- 0 % weight [Test Method: Calculated]

**Volatile Organic Compounds**
- 429 g/l [Test Method: calculated SCAQMD rule 443.1]

**Percent volatile**
- <=96 % weight [Test Method: Estimated]

**VOC Less H2O & Exempt Solvents**
- 700 g/l [Test Method: calculated SCAQMD rule 443.1]

### 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 polymerization will not occur.

**10.4. Conditions to avoid**
- Heat
- Sparks and/or flames

**10.5. Incompatible materials**
Strong oxidizing 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>
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 labeling, 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:**
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 localized 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 colored skin (cyanosis), and may be fatal.

  Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

  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</td>
<td>Inhalation-Vapor(4 hr)</td>
<td></td>
<td>No data available; calculated ATE20 - 50 mg/l</td>
</tr>
<tr>
<td>Overall product</td>
<td>Ingestion</td>
<td></td>
<td>No data available; calculated ATE &gt;5,000 mg/kg</td>
</tr>
<tr>
<td>Heptane, branched, cyclic and linear</td>
<td>Dermal</td>
<td>Rabbit</td>
<td>LD50 &gt; 2,920 mg/kg</td>
</tr>
</tbody>
</table>
Heptane, branched, cyclic and linear

Inhalation-Vapor (4 hours)  Rat  LC50 > 23.3 mg/l

Heptane, branched, cyclic and linear

Ingestion  Rat  LD50 > 5,840 mg/kg

Methyl Acetate  Dermal  Rat  LD50 > 2,000 mg/kg

Methyl Acetate

Inhalation-Vapor (4 hours)  Rat  LC50 > 49 mg/l

Methyl Acetate  Ingestion  Rat  LD50 > 5,000 mg/kg

Citric Acid, Tributyl Ester, Acetate  Dermal  Professio

nal judgement  LD50 estimated to be > 5,000 mg/kg

Citric Acid, Tributyl Ester, Acetate  Ingestion  Rat  LD50 > 25,000 mg/kg

Dimethylcyclopentane  Ingestion  LD50 estimated to be 300 - 2,000 mg/kg

Maleic Anhydride  Dermal  Rabbit  LD50  2,620 mg/kg

Maleic Anhydride  Ingestion  Rat  LD50  1,030 mg/kg

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane, branched, cyclic and linear</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>Heptane, branched, cyclic and linear</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 Sensitization

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane, branched, cyclic and linear</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>Sensitizing</td>
</tr>
</tbody>
</table>

### Respiratory Sensitization

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maleic Anhydride</td>
<td>Human</td>
<td>Sensitizing</td>
</tr>
</tbody>
</table>

### Germ Cell Mutagenicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane, branched, cyclic and linear</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 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>
</tbody>
</table>

### Carcinogenicity

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

Reproductive and/or Developmental Effects

<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>Heptane, branched, cyclic and linear</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>Heptane, branched, cyclic and linear</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>Heptane, branched, cyclic and linear</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>Heptane, branched, cyclic and linear</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></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></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 and/or bladder</td>
<td>heart</td>
</tr>
<tr>
<td>Maleic Anhydride</td>
<td>Ingestion</td>
<td>kidney and/or bladder</td>
<td>Some positive data exist, but the data are not sufficient for classification</td>
<td>Rat</td>
<td>NOAEL 55 mg/kg/day</td>
<td>80 days</td>
</tr>
<tr>
<td>Maleic Anhydride</td>
<td>Ingestion</td>
<td>liver</td>
<td>Some positive data exist, but the data are not sufficient for</td>
<td>Rat</td>
<td>LOAEL 250 mg/kg/day</td>
<td>183 days</td>
</tr>
<tr>
<td>Maleic Anhydride</td>
<td>Ingestion</td>
<td>classification</td>
<td>Rat</td>
<td>NOAEL</td>
<td>183 days</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>----------</td>
<td>----------------</td>
<td>-----</td>
<td>--------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>heart</td>
<td>Not classified</td>
<td></td>
<td>600 mg/kg/day</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>nervous system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>gastrointestinal tract</td>
<td>Not classified</td>
<td>Rat</td>
<td>150 mg/kg/day</td>
<td>80 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hematopoietic system</td>
<td>Not classified</td>
<td>Dog</td>
<td>60 mg/kg/day</td>
<td>90 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>skin</td>
<td>Not classified</td>
<td>Rat</td>
<td>150 mg/kg/day</td>
<td>80 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>endocrine system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>immune system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>eyes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>respiratory system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Aspiration Hazard

<table>
<thead>
<tr>
<th>Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane, branched, cyclic and linear</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

**Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

**Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

### SECTION 13: Disposal considerations

#### 13.1. Disposal 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.

**EPA Hazardous Waste Number (RCRA):** D001 (Ignitable)

### SECTION 14: Transport Information

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

### SECTION 15: Regulatory information

#### 15.1. US Federal Regulations

Contact 3M for more information.

**EPCRA 311/312 Hazard Classifications:**

**Physical Hazards**

Flammable (gases, aerosols, liquids, or solids)
Health Hazards

Aspiration Hazard
Respiratory or Skin Sensitization
Serious eye damage or eye irritation
Skin Corrosion or Irritation
Specific target organ toxicity (single or repeated exposure)

15.2. State Regulations
Contact 3M for more information.

15.3. Chemical Inventories
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.

This material contains one or more substances not listed on the TSCA Inventory, and is manufactured for export only. Within the United States, it may only be used for R&D purposes.

Contact 3M for more information.

15.4. International Regulations
Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification
Health: 2  Flammability: 3  Instability: 0  Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Document Group: 36-3452-4  Version Number: 2.11
Issue Date: 06/02/21  Supercedes Date: 06/02/21

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M.

3M USA SDSs are available at www.3M.com