1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier
Material Name: Apiezon Wax W.

1.2 Relevant identified uses of the substance or mixture and uses advised against
Product Use: Hard vacuum sealing / mounting wax; etch resist.
Uses advised against: None.

1.3 Details of the supplier of the substance or mixture
Company: M&I Materials Ltd., Hibernia Way, Trafford Park, Manchester, M32 0ZD, UK.
Telephone: +44 (0)161 864 5409.
Emergency Telephone: +44 (0)161 864 5439.
Email: RussellMartin@mimaterials.com.

2. Hazards Identification
This product is not classified as hazardous and this document has been compiled for information purposes, in accordance with regulation 1907/EC/2006, Annex II, as amended by Regulation (EU) No. 453/2010 and OSHA hazard communication guidelines.

2.1 Classification of the substance or mixture

2.2 Label elements
Regulation (EC) No 1272/2008 (CLP): No symbol or signal word.

2.3 Other hazards
Traces of hydrogen sulphide may be liberated at high temperatures. Hydrogen sulphide may accumulate in confined spaces and is highly toxic if inhaled in sufficient concentrations. See 4.2 for further information. Contact with hot material can cause thermal burns.

3. Composition/Information on Ingredients
3. Substance
CAS No.: 64741-56-6.
All constituents are listed on the TSCA inventory.

4. First Aid Measures
4.1 Description of first aid measures
Inhalation: If inhalation of mists, fumes or vapour causes irritation remove to fresh air. If casualty does not rapidly recover seek medical attention.
Skin: In the case of contact with hot product flush affected area with cold water, do not attempt to remove wax. Cover with sterile dressing and obtain medical attention.
Eyes: If in contact with hot product cool the area by flushing with large amounts of cold water. Do not attempt to remove the wax from the burn area. Seek medical attention. If in contact with cold product flush the eye with copious amounts of water, if persistent irritation occurs seek medical attention.
Ingestion: Do not induce vomiting, obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed
If exposed to hydrogen sulphide fumes the effects will depend on the airborne concentration - 0.02ppm odour threshold, smell of rotten eggs; 10ppm eye and respiratory tract irritation.
## 4.3 Indication of any immediate medical attention and special treatment needed

In the case of burns do not remove the wax from the skin, it will provide an airtight sterile covering, which will eventually fall away with the scab as the burn heals. If removal is attempted mineral oil (not mineral spirits) or a mineral oil based ointment may be applied to help soften the product.

## 5. Fire Fighting Measures

### 5.1 Extinguishing media

Carbon dioxide, dry powder, foam or water fog. Do not use water jets.

### 5.2 Special hazards arising from the substance or mixture

Combustion products include carbon monoxide.

### 5.3 Advice for fire fighters

Protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

## 6. Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes. Hot product should be handled so that there is no risk of burns.

### 6.2 Environmental precautions

No special precautions required.

### 6.3 Methods and material for containment and cleaning up

Molten material should be allowed to cool and solidify before collecting for disposal.

## 7. Handling and Storage

### 7.1 Precautions for safe handling

Avoid contact with hot material to prevent burns.

### 7.2 Conditions for safe storage, including any incompatibilities

No special precautions required.

### 7.3 Specific end use(s)

No special precautions required.

## 8. Exposure Controls/Personal Protection

### 8.1 Control parameters

At ambient temperature wax has very low volatility, so development of fumes is highly unlikely. At high temperatures hydrogen sulphide may be released.

**Workspace Exposure Limits:**

<table>
<thead>
<tr>
<th>Substance</th>
<th>8hr TWA</th>
<th>STEL</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen sulphide</td>
<td>7mg/m³</td>
<td>14mg/m³</td>
<td>EH40</td>
</tr>
</tbody>
</table>

### 8.2 Exposure controls

The level of controls depends on the use. In most cases very small quantities of material are used. If heating to apply wax ensure adequate ventilation. Eye washes should be available for emergency use.

**Respiratory protection:** None required.

**Hand protection:** Wear heat resistant gloves when handling or applying hot wax.

**Eye protection:** Wear eye protection when handling/applying hot wax.
### 9. Physical and Chemical Properties

**9.1 Information on basic physical and chemical properties**

- **Appearance**: Black solid. Liquid at high temperature.
- **Odour**: None at ambient.
- **pH**: Not applicable.
- **Melting point**: 80 to 90°C.
- **Initial boiling point and boiling range**: >320°C.
- **Flash point**: 338°C.
- **Flammability (solid, gas)**: Data not available.
- **Upper/lower flammability or explosive limits**: Data not available.
- **Vapour pressure**: Approx $4.5 \times 10^{-9}$ Torr at 20°C.
- **Vapour density**: Not applicable.
- **Relative density**: 1.055 at 20°C.
- **Water solubility**: Insoluble.
- **Solubility**: Soluble in aromatic hydrocarbon solvents.
- **Partition coefficient**: n-octanol/water: Data not available.
- **Auto-ignition temperature**: >400°C.
- **Decomposition temperature**: Data not available.
- **Viscosity**: Not applicable.
- **Explosive properties**: Data not available.
- **Oxidising properties**: Data not available.

**9.2 Other information**

Not applicable.

### 10. Stability and Reactivity

**10.1 Reactivity**

Stable under normal conditions of use.

**10.2 Chemical stability**

Stable under normal conditions of use.

**10.3 Possibility of hazardous reactions**

Data not available.

**10.4 Conditions to avoid**

Temperatures >150°C.

**10.5 Incompatible materials**

Strong oxidising agents.

**10.6 Hazardous decomposition products**

Hydrogen sulphide.

### 11. Toxicological Information

**11.1 Information on toxicological effects**

- **Likely routes of exposure**: Skin and eyes are the most likely routes for exposure. Inhalation of vapours at high temperatures is possible. Accidental ingestion may occur.
- **Acute oral toxicity**: Low toxicity: LD50 >5000mg/kg.
- **Acute dermal toxicity**: Expected to be of low toxicity: LD50 >2000mg/kg.
- **Acute inhalation toxicity**: Low toxicity by inhalation. Avoid vapours from heated...
## 12. Ecological Information

When used and/or disposed of as indicated no adverse environmental effects are foreseen. Ecotoxicological effects based on knowledge of similar substances.

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>12.1 Toxicity</strong></td>
<td>Expected to be practically non-toxic.</td>
</tr>
<tr>
<td><strong>12.2 Persistence and degradability</strong></td>
<td>Not regarded as inherently biodegradable.</td>
</tr>
<tr>
<td><strong>12.3 Bioaccumulative potential</strong></td>
<td>Has the potential to bioaccumulate.</td>
</tr>
<tr>
<td><strong>12.4 Mobility in soil</strong></td>
<td>Product has low mobility in soil.</td>
</tr>
<tr>
<td><strong>12.5 Results of PBT and vPvB assessment</strong></td>
<td>The product does not meet criteria for toxicity which requires further assessment. It is not considered PBT or vPvB.</td>
</tr>
<tr>
<td><strong>12.6 Other adverse effects</strong></td>
<td>No other adverse effects envisaged.</td>
</tr>
</tbody>
</table>

## 13. Disposal Considerations

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>13.1 Waste treatment methods</strong></td>
<td>Product and packaging must be disposed of in accordance with local and national regulations. May be incinerated. Unused product may be returned for reclamation.</td>
</tr>
</tbody>
</table>

## 14. Transport Information

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>14.1 UN number</strong></td>
<td>Not relevant.</td>
</tr>
<tr>
<td><strong>14.2 UN proper shipping name</strong></td>
<td>Not relevant.</td>
</tr>
<tr>
<td><strong>14.3 Transport hazard class</strong></td>
<td>Not relevant.</td>
</tr>
<tr>
<td><strong>14.4 Packing group</strong></td>
<td>Not relevant.</td>
</tr>
<tr>
<td><strong>14.5 Environmental hazards</strong></td>
<td>Not relevant.</td>
</tr>
</tbody>
</table>
14.6 Special precautions for user
Not relevant.

15. Regulatory Information
15.1 Safety, health and environmental regulations/legislation specific for the
substance or mixture
Product is not subject to Authorisation under REACH.
All constituent substances in this product are listed in the TSCA inventory.

15.2 Chemical safety assessment
A chemical safety assessment has been performed for this substance.

16. Other Information
Compiled according to regulation 1907/EC/2006 Annex II, as amended by Regulation
(EU) No.453/2010 and OSHA hazard communication guidelines.

16.1 Changes from last issue:
Additional regulatory information to comply with OSHA guidelines.

The information provided in this Safety Data Sheet is correct to our best knowledge, information and belief at the date of its
publication. It is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not
be construed as guaranteeing any specific property of the product.