1. Product and Company Identification

Product name: Apiezon Wax W, Apiezon Wax W40
Synonyms: None
Item Numbers: Apiezon Wax W: H023-01-014; H111-76-007
             Apiezon Wax W40: H023-01-015

European Contact Details
Edwards, Manor Royal, Crawley
West Sussex, RH10 9LW, England

General enquiries
UK : +44 (0)1293 528844
France : +(33) 1 47 98 24 01
Germany : +(49) 6420-82-410
Italy : +(39) 0248-4471

US Contact Details
Edwards, 301 Ballardvale Street,
Wilmington, MA 01887

General enquiries
+(1) 978-658-5410
Toll Free: 1-800-848-9800

24 h Emergency telephone number:
Chemtrec: 1-800-424-9300

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>% Weight</th>
<th>CAS No</th>
<th>Hazard class*</th>
<th>Risk phrase*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wax W: Petroleum Residuum</td>
<td>100</td>
<td>64741-56-6</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Wax W40: Petroleum Residuum</td>
<td>100</td>
<td>64741-56-6</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8012-95-1</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

*Hazard class & Risk phrase. These columns are only completed for ingredients which are classified as hazardous under EU Directive (67/548/EEC, as amended) and are present in sufficient concentration to make the overall substance hazardous. In all other situations, the column will be completed as "Not applicable".

3. Hazards Identification

**EMERGENCY OVERVIEW**

This material when properly handled according to good working and hygienic practices is not dangerous to human health and the environment at ambient temperature. There is the danger of burns when handling/applying hot wax. Trace amounts of hydrogen sulphide and sulphur dioxide are liberated at elevated temperatures.

For short and long term exposure effects see Section 11 Toxicological data.

Eye Effects: No hazards in normal use at ambient temperature. There is the danger of burns when handling/applying hot wax.
PRODUCT NAME: WAX - APIEZON W & W40

Skin Effects: No hazards in normal use at ambient temperature. When using W40, repeated and prolonged skin contact may cause skin disorders. There is the danger of burns when handling/applying hot wax.

Ingestion/Oral Effects: No hazards in normal use at ambient temperature.

Inhalation Effects: No hazards in normal use at ambient temperature. Trace amounts of hydrogen sulphide and sulphur dioxide are liberated at elevated temperatures.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

<table>
<thead>
<tr>
<th>NFPA Hazard codes</th>
<th>HMIS Hazard codes</th>
<th>Rating System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>0</td>
<td>0 = No Hazard</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
<td>1 = Slight Hazard</td>
</tr>
<tr>
<td>Instability</td>
<td>0</td>
<td>2 = Moderate Hazard</td>
</tr>
<tr>
<td></td>
<td>Reactivity</td>
<td>3 = Serious Hazard</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>4 = Severe Hazard</td>
</tr>
</tbody>
</table>

4. First Aid Measures

Eyes: Irrigate with copious quantities of cold water. If irritation persists, seek medical attention.

Skin: Cold wax: Wash with soap and water. If irritation persists, seek medical attention.
       Hot wax: Flush affected area with cold water. Do not remove wax. Cover with a sterile dressing and obtain medical attention.

Ingestion/Oral: Do not induce vomiting. Obtain medical attention.

Inhalation: If overcome by fumes, remove from source. If breathing problems occur, a qualified individual should administer oxygen or artificial respiration as indicated. Obtain medical attention.

Other Information: None.

5. Fire Fighting Measures

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

Fire and Explosion Hazard: No unusual hazards identified. Hazardous decomposition products: Trace amounts of hydrogen sulphide and sulphur dioxide are liberated at elevated temperatures.

Special Protective Equipment for Fire Fighters: In confined spaces, fire fighters should wear a self-contained breathing apparatus (SCBA) which meets appropriate standards operated in positive pressure mode, and full turnout gear.

For Flammability Properties - see Section 9
6. Accidental Release Measures

Wear suitable protective equipment to prevent contact with eyes. Collect the spill in containers and dispose of safely: see Section 13 "Disposal Considerations".

7. Handling and Storage

Handling: No special precautions required.

Storage: No special precautions required.

8. Exposure Controls/Personal Protection

**Exposure Limits:**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>ACGIH - TLV -</th>
<th>OSHA - PEL</th>
<th>Occupational Exposure Limits EH40 (UK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wax fume</td>
<td>2 mg/m³ - 8 H TWA</td>
<td>Not applicable</td>
<td>2 mg/m³ TWA 6 mg/m³ (STEL)</td>
</tr>
</tbody>
</table>

**Personal Protection:**

Engineering Measures: None required under normal conditions of use.

Respiratory Protection: None required under normal conditions of use.

Hand/Skin Protection: None required under normal conditions of use. Wear heat resistant gloves when handling/applying hot wax.

Eye/Face Protection: None required under normal conditions of use. Wear eye protection when handling/applying hot wax.

Hygiene Measures: Practice good workplace hygiene. Do not eat or smoke when handling. Wash hands after use and before eating.

Other/General Protection: None.

9. Physical and Chemical Properties

**Apiezon Wax W**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance and Odour</td>
<td>Black solid. Odourless at ambient temperature.</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH (as supplied)</td>
<td>No data available</td>
</tr>
<tr>
<td>Softening Point</td>
<td>80-90 / 176-194 °C/°F</td>
</tr>
<tr>
<td>Insoluble</td>
<td>Auto Ignition</td>
</tr>
<tr>
<td>&gt; 400 / 752 °C/°F</td>
<td></td>
</tr>
<tr>
<td>No data available</td>
<td>Flash Point</td>
</tr>
<tr>
<td>338 / 640 °C/°F</td>
<td></td>
</tr>
<tr>
<td>1.055 @ 20 °C / 68 °F</td>
<td>Vapour Pressure (mbar)</td>
</tr>
<tr>
<td>6 x 10⁻⁹ @ 20 °C</td>
<td>Vapour Pressure (Torr)</td>
</tr>
<tr>
<td>4.5 x 10⁻⁹ @ 68 °F</td>
<td></td>
</tr>
</tbody>
</table>
PRODUCT NAME: WAX - APIEZON W & W40

Apiezon Wax W40

<table>
<thead>
<tr>
<th>Appearance and Odour</th>
<th>Black solid. Odourless at ambient temperature.</th>
<th>Boiling point</th>
<th>Not applicable</th>
<th>°C/°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH (as supplied)</td>
<td>No data available</td>
<td>Softening Point</td>
<td>45 / 113</td>
<td></td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
<td>Auto Ignition</td>
<td>&gt; 400 / 752</td>
<td>°C/°F</td>
</tr>
<tr>
<td>Volatile Content by Volume</td>
<td>No data available</td>
<td>Flash Point</td>
<td>320 / 608</td>
<td>°C/°F</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.017 @ 20 °C / 68 °F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapour Pressure (mbar)</td>
<td>8 x 10^-8 @ 20 °C</td>
<td>Vapour Pressure (Torr)</td>
<td>6 x 10^-8 @ 68 °F</td>
<td></td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Stability: Stable.

Material/Conditions to Avoid:
- Apiezon Wax W: Avoid temperatures > 150 °C / 302 °F. Avoid strong oxidising agents.
- Apiezon Wax W40: Avoid temperatures > 105 °C / 221 °F. Avoid strong oxidising agents.

Hazardous Decomposition: Trace amounts of hydrogen sulphide and sulphur dioxide are liberated at elevated temperatures.

Hazardous Polymerisation: Will not polymerise.

11. Toxicological Information

For a comprehensive description for the various toxicological (health) effects which may arise if the user comes into contact with the substance or preparation refer to Section 3 Hazards Identification.

Animal data:
- LD50 value: Oral: > 2 g/kg (rat) *, Dermal: > 2 g/kg (rabbit) *
- LC50 value: No data available.

* Data applies to Apiezon Wax W40 only.

Carcinogenicity:
No known carcinogenic or mutagenic effects.

12. Ecological Information

When the product is used and/or disposed of as indicated, no adverse environmental effects are foreseen.

Mobility: The material is non-volatile and is insoluble in water.

Degradability: Wax W is not regarded as inherently biodegradable. Wax W40 base oil is slowly biodegradable in aerobic conditions.
13. Disposal Considerations
The product and its packaging must be disposed of in accordance with local and national regulations. The product may be incinerated.
Unused product may be returned for reclamation.

14. Transport Information
This product is not classified as dangerous under transport regulations.

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>EUROPEAN</th>
<th>CANADIAN TDG</th>
<th>UNITED STATES DOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Identification Number</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Shipping Label</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

15. Regulatory Information

European Regulatory Information
This product has been classified in accordance with the Dangerous Substances Directive (67/548/EEC, as amended) and the Preparations Directive (88/379/EEC, as amended), implemented in the UK as the Chemical (Hazard Information and Packing) Regulations 1994 (CHIP, as amended).
Classified as dangerous to supply : No
Risk Phrases : Not applicable
Safety Phrases : Not applicable
Symbols : None

United States Regulatory Information
All ingredients contained in this product are included in the EPA TSCA Chemical Substance Inventory.

SARA TITLE III - SECTION 313 SUPPLIER NOTIFICATION
This product does not contain toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and 40 CFR Part 372.
California Proposition 65: This product does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.

Canadian Regulatory Information
WHMIS Classification: Not applicable
All ingredients in this product are included in the Canadian DSL.
PRODUCT NAME : WAX - APIEZON W & W40

16. Other Information

This MSDS is compiled in accordance with ANSI Z400.1 and the EU Safety Data Sheet Directive 91/155/EEC. Sources of information for this data sheet:

- M & I Materials Ltd “APIEZON WAX W40” Safety Data Sheet. Issue Date : January 2006.

Glossary:

ACGIH - American Conference of Governmental Industrial Hygienists; ANSI - American National Standards Institute; Canadian TDG - Canadian Transportation of Dangerous Goods; CAS - Chemical Abstracts Service; Chemtrec - Chemical Transportation Emergency Center (US); CHIP - Chemical (Hazard Information and Packing); DSL - Domestic Substances List; EH40 (UK) - HSE Guidance Note EH40 Occupational exposure limits; EPA - Environmental Protection Agency; EPCRA - Emergency Planning and Community Right-to-Know Act; HMIS - Hazardous Material Information Service; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OSHA - Occupational Safety and Health Administration, US department of Labour; PEL - Permissible exposure limit; SARA (Title III) - Superfund Amendments and Reauthorization Act; SCBA - Self-Contained Breathing Apparatus; STEL - Short Term Exposure Limit; TLV - threshold limit value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-Weighted Average; US DOT - US Department of Transportation; WHMIS - Workplace Hazardous Materials Information System.

Revisions:

Nov 2007 - Data Sheet updated to reflect the latest supplier safety information.

Although the information and recommendations in this data sheet are to the best of our knowledge correct, it is recommended that you make your own determination of the material’s suitability for your purpose before you use it. The information contained in this data sheet has been reproduced from the manufacturers data; the accuracy of this information is the responsibility of the manufacturer. Edwards accept no responsibility for damage of any nature resulting from the use of, or the reliance upon, this data sheet.