1. Product and Company Identification

Product Name: Apiezon H Grease; Apiezon T Grease
Synonyms: None
Item Numbers: Apiezon H Grease: H111-50-001
Apiezon T Grease: H023-01-018

European Contact Details
BOC Edwards, Manor Royal, Crawley,
West Sussex, RH10 2LW, England
General enquiries
UK: +44 (0)1293 528844
France: +(33) 1 47 98 24 01
Germany: +(49) 89-991918-0
Italy: +(39) 0248-4471

US Contact Details
BOC 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>High molecular weight petroleum hydrocarbons, inert mineral filler, high molecular weight polymer</td>
<td>Percentage composition not available</td>
<td>Apiezon H: 65154-51-0</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Apiezon T: 9064-45-3</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.

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

Eye Effects: May cause transient irritation.
Skin Effects: Repeated and prolonged contact may be expected to cause some irritation.
Ingestion/Oral Effects: May cause nausea, vomiting and diarrhoea.
Inhalation Effects: Low volatility makes hazardous inhalation effects unlikely.
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></td>
<td>3 = Serious Hazard</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 = Severe hazard</td>
</tr>
</tbody>
</table>

4. First Aid Measures

**Eyes:** Irrigate with copious quantities of water.

**Skin:** Wash with soap and water.

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

**Inhalation:** None envisaged. If high concentrations of mists or fumes are inhaled, remove to fresh air. If breathing problems occur, a qualified individual should administer oxygen or artificial respiration as indicated. Seek immediate 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 known. Hazardous decomposition products: trace amounts of polycyclic hydrocarbons. Direct water stream may cause violent frothing.

**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

Remove grease and clean area to prevent slip hazard. Place recovered grease in containers. Prevent product from entering drains, sewers and watercourses.

7. Handling and Storage

Handling and storage require no special precautions.
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>Refined mineral oil</td>
<td>5 mg/m³ - 8 H TWA¹</td>
<td>5 mg/m³ - 8 H TWA¹</td>
<td>5 mg/m³ - 8h TWA²</td>
</tr>
<tr>
<td></td>
<td>10 mg/m³ - STEL (as oil mist, mineral)</td>
<td>(as oil mist, mineral)</td>
<td>10 mg/m³ - STEL²</td>
</tr>
</tbody>
</table>

¹ As sampled by a method which does not collect vapour.
² Recommendation by the manufacturer for oil mists.

Personal Protection:

Engineering Measures: None required under normal conditions of use.
Respiratory Protection: None required under normal conditions of use.
Hand/Skin Protection: Wear impervious gloves. Avoid prolonged exposure.
Eye/Face Protection: Wear safety glasses.
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 H Grease

<table>
<thead>
<tr>
<th>Appearance and Odour</th>
<th>Dark brown, odourless semi solid</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>Melting Point</td>
<td>Withstands 250/482 without melting</td>
<td>°C/°F</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
<td>Auto Ignition</td>
<td>&gt;320/608</td>
<td>°C/°F</td>
</tr>
<tr>
<td>Volatile Content by Volume</td>
<td>No data available</td>
<td>Flash Point</td>
<td>260/500</td>
<td>°C/°F</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.918 @ 20°C/68°F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapour Pressure (mbar)</td>
<td>&lt;1 x 10⁻⁷ @ 20°C</td>
<td>Vapour Pressure (Torr)</td>
<td>&lt;7.5 x 10⁻⁸ @ 68°F</td>
<td></td>
</tr>
</tbody>
</table>

Apiezon T Grease

<table>
<thead>
<tr>
<th>Appearance and Odour</th>
<th>Brown, odourless semi solid</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>Melting Point</td>
<td>125/257</td>
<td>°C/°F</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
<td>Auto Ignition</td>
<td>&gt;320/608</td>
<td>°C/°F</td>
</tr>
<tr>
<td>Volatile Content by Volume</td>
<td>No data available</td>
<td>Flash Point</td>
<td>&gt;260/500</td>
<td>°C/°F</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.912 @ 20°C/68°F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapour Pressure (mbar)</td>
<td>&lt;1 x 10⁻⁸ @ 20°C</td>
<td>Vapour Pressure (Torr)</td>
<td>&lt;7.5 x 10⁻⁸ @ 68°F</td>
<td></td>
</tr>
</tbody>
</table>
10. Stability and Reactivity


Material/Conditions to Avoid:
- Apiezon H Grease: avoid temperatures >250°C/482°F. Avoid strong oxidising agents.
- Apiezon T Grease: avoid temperatures >120°C/248°F. Avoid strong oxidising agents.

Hazardous Decomposition: Trace amounts of polycyclic hydrocarbons.

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: >2g/kg (rat)
  Dermal: >2g/kg (rabbit)
- LC50 value: No data available.

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 insoluble in water.

Degradability: the material 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.

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 materials contained in this product are on the U.S. Toxic Substances Control Act (TSCA).

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 Classified
All ingredients in this product are included in the Canadian DSL.

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:
- Communications with M & I Materials.
**PRODUCT NAME:** GREASE - APIEZON H & T

**Glossary:**
- **CAS:** Chemical Abstracts Service
- **NFPA:** National Fire Protection Association
- **HMIS:** Hazardous Material Information Service
- **LD:** Lethal Dose
- **LC:** Lethal Concentration
- **ACGIH:** American Conference of Governmental Industrial Hygienists
- **TLV:** Threshold limit value
- **OSHA:** Occupational Safety and Health Administration
- **PEL:** Permissible exposure limit
- **EH40 (UK):** HSE Guidance Note EH40
- **PPM:** parts per million
- **TWA:** Time-Weighted Average
- **STEL:** Short Term Exposure Limit
- **Canadian TDG:** Canadian Transportation of Dangerous Goods
- **US DOT:** US Department of Transportation
- **HSDB:** Hazardous Substances Data Bank
- **RTECS:** Registry of Toxic Effects of Chemical Substances
- **CHEMID:** Chemical Identification
- **DSL:** Domestic Substances List
- **TSCA:** Toxic Substances Control Act Public Law 94-469
- **CERCLA:** Comprehensive Environmental Response, Compensation and Liability Act
- **EPCRA:** Emergency Planning and Community Right-to-Know Act
- **CAA:** Clean Air Act
- **SARA (Title III):** Superfund Amendments and Reauthorization Act
- **SARA 313:** Superfund Amendments and Reauthorization Act, Section 313
- **EHS:** Extremely Hazardous Substance
- **WHMIS:** Workplace Hazardous Materials Information System

**Revisions**

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 manufacturer's data, the accuracy of this information is the responsibility of the manufacturer. BOC Edwards accept no responsibility for damage of any nature resulting from the use of, or the reliance upon this data sheet.