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

1.1 **Product Identifier**
   - **Material Name:** Apiezon AP100 Grease.

1.2 **Relevant identified uses of the substance or mixture and uses advised against**
   - **Product use:** Lubricating grease for ultra-high vacuum applications.
   - **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:** apiezontech@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**
   - None.

### 3. Composition/Information on Ingredients

#### 3.1 Mixture Composition

<table>
<thead>
<tr>
<th>Constituent</th>
<th>CAS Number</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purified Hydrocarbon</td>
<td>8009-03-8</td>
<td>80%</td>
</tr>
<tr>
<td>PTFE</td>
<td>9002-84-0</td>
<td>20%</td>
</tr>
</tbody>
</table>

All constituents are listed on the TSCA inventory.

### 4. First Aid Measures

4.1 **Description of first aid measures**
   - **Inhalation:** None envisaged due to the low vapour pressure of the substance.
   - **Skin:** Wash with soap and water.
   - **Eyes:** Irrigate with copious amounts of water.
   - **Ingestion:** Do not induce vomiting, obtain medical attention.

4.2 **Most important symptoms and effects, both acute and delayed**
   - No adverse effects expected.

4.3 **Indication of any immediate medical attention and special treatment needed**
   - No special treatment required.

### 5. Fire Fighting Measures

5.1 **Extinguishing media**
   - Carbon dioxide, dry powder, foam or water fog. Do not use water jets.
6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Spilt product constitutes a slip hazard. Avoid contact with eyes.

6.2 Environmental precautions
No special precautions required.

6.3 Methods and material for containment and cleaning up
Can be wiped from surfaces and residues cleaned with water and detergent.

7. Handling and Storage

7.1 Precautions for safe handling
No special precautions required.

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
No relevant control parameters.

8.2 Exposure controls
The level of controls depends on the use. In most cases very small quantities of material are used. Eye washes should be available for emergency use.
Respiratory protection: None required.
Hand protection: Wash hands after use. For prolonged or repeated skin contact gloves are recommended.
Eye protection: None required.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties
Appearance: Semi-solid yellow grease.
Odour: None.
PH: Not applicable.
Melting point: 42 to 52°C.
Initial boiling point and boiling range: >450°C.
Flash point: >200°C.
Flammability (solid, gas): Data not available.
Upper/lower flammability or explosive limits: Data not available.
Vapour pressure: 7 x 10^-11 Torr at 20°C.
Vapour density: Not applicable.
Relative density: 1.042 at 20°C.
Water solubility: Insoluble.
Solubility: Soluble in aromatic hydrocarbon solvents.
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 >120°C.

10.5 Incompatible materials
Strong oxidising agents.

10.6 Hazardous decomposition products
May liberate toxic fluorine compounds at temperatures >300°C.

11. Toxicological Information

11.1 Information on toxicological effects

Likely routes of exposure: Skin and eyes are the most likely routes for exposure. Accidental ingestion may occur. Inhalation is not expected to be a relevant route of exposure.

Acute oral toxicity: Low toxicity: LD50 >2000mg/kg.
Acute dermal toxicity: Expected to be of low toxicity: LD50 >2000mg/kg.
Acute inhalation toxicity: Low volatility makes inhalation unlikely.
Skin corrosion/irritation: Repeated and prolonged skin contact may cause dry skin or irritation.
Eye corrosion/irritation: May cause transient irritation.
Respiratory or skin sensitization: Not expected to be a skin sensitizer.
Aspiration hazard: Not considered an aspiration hazard.
Carcinogenicity/mutagenicity: Not considered a mutagenic hazard or carcinogen. Note N: The classification as a carcinogen need not apply if the full refining history is known and it can be shown that the substance from which it is produced is not a carcinogen.
This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA.
### 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.

**12.1 Toxicity**
Expected to be practically non-toxic.

**12.2 Persistence and degradability**
Inherently biodegradable.

**12.3 Bioaccumulative potential**
Has the potential to bioaccumulate.

**12.4 Mobility in soil**
Product has low mobility in soil.

**12.5 Results of PBT and vPvB assessment**
The product does not meet criteria for toxicity which requires further assessment. It is not considered PBT or vPvB.

**12.6 Other adverse effects**
No other adverse effects envisaged, PTFE biologically inert.

### 13. Disposal Considerations

**13.1 Waste treatment methods**
Product and packaging must be disposed of in accordance with local and national regulations. Must not be incinerated due to liberation of toxic gases at >300°C. Unused product may be returned for reclamation.

### 14. Transport Information

Not classified as hazardous under air (ICAO/IATA), sea (IMDG), road (ADR) or rail (RID) regulations.

**14.1 UN number**
Not relevant.

**14.2 UN proper shipping name**
Not relevant.

**14.3 Transport hazard class**
Not relevant.

**14.4 Packing group**
Not relevant.

**14.5 Environmental hazards**
Not relevant.

**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


16.1 Changes from last issue:
Section 1 - Email contact details.
Section 3 - Composition table.

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.