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 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
Regulation (EC) No 1272/2008 (CLP): Not classified.

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 Mixture
Composition:

Constituent	CAS Number	Contents
Purified Hydrocarbon	8009-03-8	80%
PTFE	9002-84-0	20%

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.

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5.2 Special hazards arising from the substance or mixture
Combustion products include fluorine compounds, such as hydrogen fluoride.

5.3 Advice for fire fighters
No special precautions are required.

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: 7×10^{-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.

Any recommendation or suggestion relating to the use, storage, handling or properties of the products supplied by M&I Materials Ltd or any member of its group, either in sales and technical literature or in response to a specific enquiry or otherwise, is given in good faith but it is for the customer to satisfy itself of the suitability of the product for its own particular purposes and to ensure that the product is used correctly and safely in accordance with the manufacturer's written instructions. © M&I Materials Ltd.

Partition coefficient: n-octanol/water: Data not available.
Auto-ignition temperature: >250°C.
Decomposition temperature: >300°C.
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 >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.

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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.

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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:

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.