

 **BOC EDWARDS**
MATERIAL SAFETY DATA SHEET

P120-03-030
Issue: B
Rev Date: 01-02-05
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PRODUCT NAME : GREASE - APIEZON AP100

1. Product and Company Identification

Product Name: Apiezon Grease AP100
Synonyms: None
Item Numbers : H023-01-030, H023-00-043

European Contact Details

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2. Composition/Information on Ingredients

Ingredient	% Weight	CAS No	Hazard class*	Risk phrase*
Yellow petrolatum BP grade; Polytetrafluoroethylene	100	65154-52-1	Not applicable	Not applicable

*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. Harmful effects are expected only when thermal decomposition produces toxic gases at temperatures above 500°C/932°F.

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



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Eye Effects: May cause transient irritation.
 Skin Effects: Repeated or prolonged contact may cause skin disorders.
 Ingestion/Oral Effects: May cause vomiting, nausea and diarrhoea.
 Inhalation Effects: Low volatility makes inhalation an unlikely hazard. Inhalation of fluorinated decomposition products may cause polymer fume fever with flu-like symptoms. Polymer fume fever may result from smoking contaminated tobacco.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

NFPA Hazard codes		HMIS Hazard codes		Rating System
Health	1	Health	1	0 = No Hazard
Flammability	1	Flammability	1	1 = Slight hazard
Instability	0	Reactivity	0	2 = Moderate Hazard
				3 = Serious Hazard
				4 = Severe hazard

4. First Aid Measures

Eyes: Irrigate with copious quantities of cold water.
Skin: None envisaged.
Ingestion/Oral: Do not induce vomiting; obtain medical attention.
Inhalation: None envisaged. If fumes produced at elevated temperatures 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. Hazardous decomposition : may liberate toxic gases at temperatures above 500°C/932°F. Fire may produce toxic fluorine compounds including hydrogen fluoride, phosgene and perfluoroolefins. 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 turn out gear.

For Flammability Properties - see Section 9

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6. Accidental Release Measures

Spilt product constitutes a slip hazard. Prevent product from entering drains, sewers and watercourses. Place recovered grease in containers.

7. Handling and Storage

Avoid handling at temperatures above 290 °C/554 °F without adequate ventilation. Do not carry cigarettes or cigars or smoke in areas where this product is being used or stored. Greasy hands may contaminate tobacco products. Smoking contaminated products may cause polymer fume fever. Wash thoroughly after handling and before meals and breaks.

Exposure Controls/Personal Protection

Exposure Limits

Ingredient	ACGIH - TLV -	OSHA - PEL	Occupational Exposure Limits EH40 (UK)
None	Not applicable	Not applicable	Not applicable

Note : Exposure limits for mineral oil mist : 5mg/m³ 8h TWA; 10mg/m³ STEL (EH40 source)

5 mg/m³ - 8 H TWA; 10 mg/m³ - STEL (ACGIH TLV)

5 mg/m³ - 8 H TWA (OSHA PEL)

Personal Protection:

Engineering Measures: None required under normal conditions of use.

Respiratory Protection: None required under normal conditions of use.

Hand/Skin Protection: Wash hands after handling the product. Avoid prolonged exposure.

Eye/Face Protection: Wear safety glasses.

Hygiene Measures: Wash hands after use.

Other/General Protection: None

9. Physical and Chemical Properties

Appearance and Odour	Yellow, semi solid odourless grease	Boiling Point	No data available	°C/°F
pH (as supplied)	No data available	Freezing Point	45-52/113-125	°C/°F
Solubility in Water	Insoluble	Auto Ignition	>250/482	°C/°F
Volatile Content by Volume	No data available	Flash Point	>200/392	°C/°F
Specific Gravity	1.042 @ 20°C/68°F			
Vapour Pressure (mbar)	8 x 10 ⁻¹¹ @ 20°C	Vapour Pressure (Torr)	7 x 10 ⁻¹¹ @ 68°F	

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10. Stability and Reactivity

Stability: Will not polymerise.
Material/Conditions to Avoid: Avoid temperatures >120°C/248°F. Avoid strong oxidising agents.
Hazardous Decomposition: May liberate toxic gases at temperatures above 500°C/932°F.

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: Enter any reported animal data.

Carcinogenicity:

No information available.

Toxicity information for PTFE decomposition products:

Inhalation: PTFE decomposition products vary widely in toxicity in experimental animals. Four hour LC50s (inhalation) for decomposition products range from 0.76 ppm (perfluoroisobutane) to 40,000 ppm (tetrafluoroethylene monomer). Workers exposed to PTFE fumes produced at 350-380 °C (temperatures associated with liberation of hexafluoroethane, perfluoroisobutylene and octafluorocyclobutene) exhibited symptoms consistent with polymer fume fever at workplace air concentrations of 3.5 mg/m³ compounds containing fluorine.

CHRONIC: Repeated episodes of polymer fume fever may damage the lungs.

12. Ecological Information

No adverse environmental effects are foreseen when the product is used and/or disposed of as indicated. Polytetrafluoroethylene is biologically inert. The petrolatum base is slowly biodegradable in aerobic conditions. Mobility of the product is limited by its non volatility and insolubility in water.

13. Disposal Considerations

The product and its packaging must be disposed of in accordance with local and national regulations. The product MUST NOT be incinerated due to liberation of toxic gases at >500°C/932°F. Unused product may be returned for reclamation.

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14. Transport Information

This product is not regulated as dangerous under transport regulations.

PARAMETER	EUROPEAN	CANADIAN TDG	UNITED STATES DOT
Proper Shipping Name	Not applicable	Not applicable	Not applicable
Hazard Class	Not applicable	Not applicable	Not applicable
Identification Number	Not applicable	Not applicable	Not applicable
Shipping Label	Not applicable	Not applicable	Not applicable

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: D2B

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

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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 Safety Data Sheet for Apiezon AP100 Grease. Issue date : June, 1995.
- M & I Information sheet for Apiezon AP100. Issue date : April, 1998.
- National Library of Medicine (NLM) electronic databases (HSDB, RTECS, CHEMID, Toxline)

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, US department of Labour; **PEL**, Permissible exposure limit; **EH40 (UK)**, HSE Guidance Note EH40 Occupational exposure limits; **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; US, **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 manufacturers 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.