Safety Data Sheet

According to UK REACH (SI 2020/1577) as amended

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

1.1 Product identifier

Trade name: PFPE 501 Grease
Registration number: Mixture

1.2 Relevant identified uses of the substance or mixture and uses advised against

Product category:
PC1 Adhesives, sealants
PC24 Lubricants, greases, release products
Application of the substance / the mixture:
Lubricating grease. Vacuum sealing compound.
Uses advised against: None identified

1.3 Details of the supplier of the safety data sheet

Supplier:
M&I Materials Limited. Unit 2, Centenary Park,
Coronet Way, Salford, M50 1RE. United Kingdom

Tel: +44 (0)161 864 5409.
Email: apiezontech@mimaterials.com

Further information obtainable from: www. apiezon.com/contact-us/technical-enquiry

1.4 Emergency telephone number

Members of the public seeking specific information on poisons should contact: In England and Wales:
NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

SECTION 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to GB-CLP: The product is not classified, according to the GB CLP regulation.

2.2 Label elements

Labelling according to GB-CLP: Not applicable
Hazard pictograms: Not applicable
Signal word: Not applicable
Hazard statements: Not applicable

2.3 Other hazards

Results of PBT and vPvB assessment
PBT: Not applicable
vPvB: Not applicable
Determination of endocrine-disrupting properties: Not applicable

SECTION 3. Composition/Information on Ingredients

3.2 Mixtures

Description:
A blend of synthetic base oils and multifunctional additives with thickener system. The ingredients are not classified as hazardous or are below disclosure limits.
Dangerous components: Not applicable

SECTION 4.

4.1 Description of first aid measures

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First Aid Measures

After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact:
Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing: Do not induce vomiting; call for medical help immediately.
Information for doctor: Treat symptomatically and supportively.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5. Fire Fighting Measures

5.1 Extinguishing media
Suitable extinguishing agents:
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire extinguishing methods suitable to surrounding conditions.
For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture
In case of fire, the following can be released:
Carbon monoxide and carbon dioxide Hydrogen fluoride (HF)

5.3 Advice for firefighters
Protective equipment:
Wear self-contained respiratory protective device. Do not inhale explosion gases or combustion gases. Wear fully protective suit.

Additional information
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Particular danger of slipping on leaked/spilled product. Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions
Do not allow product to reach sewage system or any water course.

6.3 Methods and material for containment and cleaning up
Pick up mechanically.
Send for recovery or disposal in suitable receptacles. Clean the affected area carefully; suitable cleaners are:
Warm water and cleansing agent

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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SECTION 7. Handling and Storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.
Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.
Contains organically bound fluorine. The major hazard associated with this product is the inhlalation of thermal decomposition products. Contamination of tobacco products MUST be avoided.
Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Store away from foodstuffs.
Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
Storage class: 13

7.3 Specific end use(s)

No further relevant information available.

SECTION 8. Exposure Controls/ Personal Protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Appropriate engineering controls: No further data; see section 7.
Individual protection measures, such as personal protective equipment
General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals. Avoid close or long term contact with the skin.
Do not eat or drink while working.
Wash hands before breaks and at the end of work.
Contains PTFE. Avoid contact with naked flames and hot surfaces as corrosive and very toxic deomposition products can be formed.
Contamination of tobacco products MUST be avoided - "polymer fume fever" is associated with the smoking of tobacco contaminated in such a way.
Wash hands before eating, drinking or smoking.
Avoid contamination of materials which might be heated or burnt.
Extra care should be taken to prevent burns from contact with hot material.
Respiratory protection: Not required
Hand protection:



For prolonged contact, use protective gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves:

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Nitrile rubber, NBR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Penetration time of glove material:
Break-through time: > 480 minutes
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye/face protection:



Safety glasses with side-shields conforming to EN166.
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Body protection: Not required.
Environmental exposure controls: Do not allow to enter drains, sewers or watercourses.

SECTION 9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

General Information

Physical state:	Solid
Colour:	White
Odour:	Odourless
Melting point/freezing point:	Undetermined
Boiling point or initial boiling point and boiling range:	> 270 °C
Flammability:	Not determined
Lower and upper explosion limit	
Lower:	Not applicable
Upper:	Not applicable
Flash point:	Not applicable
Auto-ignition temperature:	Not applicable
Decomposition temperature:	Not applicable Not determined
pH:	Not applicable
Viscosity	
Kinematic viscosity:	Not applicable
Dynamic:	Not applicable
Solubility	
water:	Insoluble.
Vapour pressure at 20 °C:	< 0.1 hPa
Density and/or relative density	
Density at 20 °C:	2.003 g/cm³
Relative density:	Not determined
Vapour density:	Not applicable
Particle characteristics:	Not applicable

9.2 Other information

Appearance:	
Form:	Semi-solid
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Product is not self-igniting.

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Explosive properties:	Product does not present an explosion hazard.
Change in condition	
Evaporation rate:	Not applicable.
Information with regard to physical hazard classes:	Not applicable

SECTION 10. Stability and Reactivity

10.1 Reactivity
No further relevant information available.

10.2 Chemical stability
Thermal decomposition / conditions to be avoided:
Contains organically bound fluorine. A significant hazard associated with this product is the inhlalation of thermal decomposition products.
No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions
No dangerous reactions known.

10.4 Conditions to avoid
Heat and static discharge.

10.5 Incompatible materials
Strong oxidising agents.

10.6 Hazardous decomposition products
Carbon monoxide and carbon dioxide Hydrogen fluoride

SECTION 11. Toxicological Information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity: Based on available data, the classification criteria are not met.
Primary irritant effect:
Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/irritation: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.
STOT-single exposure: Based on available data, the classification criteria are not met.
STOT-repeated exposure: Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.
Additional toxicological information:
Contains organically bound fluorine. A significant hazard associated with this product is the inhlalation of thermal decomposition products. Use of contaminated tobacco products may give rise to polymer fume fever.
Misdiagnosis usually occurs because the symptoms resemble influenza virus infection.

11.2 Information on other hazards
Endocrine disrupting properties:
None of the ingredients are listed.

SECTION 12.

12.1 Toxicity

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Ecological Information

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability
No further relevant information available.

12.3 Bioaccumulative potential
No further relevant information available.

12.4 Mobility in soil
No further relevant information available.

12.5 Results of PBT and vPvB assessment
PBT: Not applicable
vPvB: Not applicable

12.6 Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects
Additional ecological information:
General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13. Disposal Considerations

13.1 Waste treatment methods
Recommendation:
Recommended Hierarchy of Controls:

- Minimise waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).

Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Unused product may be returned for reclamation.
Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.
Must not be incinerated due to liberation of toxic gases at >300°C.

UK List of Waste	
12 00 00	WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS
12 01 00	wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01 12*	spent waxes and fats
15 00 00	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01 00	packaging (including separately collected municipal packaging waste)
15 01 10*	packaging containing residues of or contaminated by hazardous substances

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Uncleaned packaging:
Recommendation:
Do not reuse empty containers - dispose of in accordance with the regulations issued by the appropriate local authorities.
Containers, even those that are “empty,” may contain residues that can develop flammable and/or hazardous vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

SECTION 14. Transport Information

14.1 UN number or ID number	
ADR, IMDG, IATA	Not applicable
14.2 UN proper shipping name	
ADR, IMDG, IATA	Not applicable
14.3 Transport hazard class(es)	
ADR, ADN, IMDG, IATA	
Class	Not applicable
14.4 Packing group	
ADR, IMDG, IATA	Not applicable
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	Not applicable
14.7 Maritime transport in bulk according to IMO instruments	Not applicable
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	Not applicable

SECTION 15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Poisons Act
Regulated explosives precursors: None of the ingredients are listed.
Regulated poisons: None of the ingredients are listed.
Reportable explosives precursors: None of the ingredients are listed.
Reportable poisons: None of the ingredients are listed.
Control Of Major Accident Hazards Regulations 2015 (COMAH)
Named dangerous substances - ANNEX I: None of the ingredients are listed.
DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II: None of the ingredients are listed.
REGULATION (EU) 2019/1148
Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3)): None of the ingredients are listed.
Annex II - REPORTABLE EXPLOSIVES PRECURSORS: None of the ingredients are listed.
Regulation (EC) No 273/2004 on drug precursors: None of the ingredients are listed.
Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors: None of the ingredients are listed.

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15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16. Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
This Safety Data Sheet is supplied on a voluntary basis.

Department issuing SDS: M&I Materials Ltd. Technical Department

Abbreviations and acronyms:
UK REACH: REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
GB CLP: REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.
UFI: Unique Formula Identifier
UK- REACH: The UK REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
GB- CLP: Retained GB CLP Regulation (EU) No. 1272/2008 as amended for Great Britain on the Classification, Labelling and Packaging of Chemicals.
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

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