

Safety Data Sheet

according to UK REACH Regulation

ADDIFLON PFPE Solvent A

Revision date: 24.09.2024

Product code: 717276

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

ADDIFLON PFPE Solvent A

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Cleaning agent. Solvents.

1.3. Details of the supplier of the safety data sheet**Manufacturer**

| | | |
|-------------------------|--------------------------------|-------------------------------|
| Company name: | ADDINOL Lube Oil GmbH | |
| | Gebäude 4609 | |
| Street: | Am Haupttor | |
| Place: | D-06237 Leuna | |
| Telephone: | +49 (0) 3461 845-0 | Telefax: +49 (0) 3461 845-555 |
| E-mail: | info@addinol.de | |
| Contact person: | Application Technology | |
| Internet: | www.addinol.de | |
| Responsible Department: | ADDINOL Application Technology | |

Supplier

| | | |
|---------------|--|-------------------------|
| Company name: | Gidov Oil & Logistics Ltd. | |
| Street: | 76 Cobham Road, Ferndown Industrial Estate | |
| Place: | GB-TN157DA Wrotham, Sevenoaks Kent | |
| Telephone: | +44 7729229830 | Telefax: +44 7729229830 |
| E-mail: | sales@addinol.co.uk | |
| Internet: | https://www.gidovlogistics.co.uk/ | |

1.4. Emergency telephone number:

+44 7729229830 - This number is serviced during office hours.

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Aquatic Chronic 4; H413

Full text of hazard statements: see SECTION 16.

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2. Label elements**GB CLP Regulation****Hazard statements**

H413 May cause long lasting harmful effects to aquatic life.

Precautionary statements

| | |
|------|---|
| P273 | Avoid release to the environment. |
| P501 | Dispose of contents/container to industrial incineration plant. |

Additional advice on labelling

Product is classified and labelled in accordance with EC regulations or the corresponding national laws.

2.3. Other hazards

No risks worthy of mention.

If handled with proper care and at intended use, the product does not cause any harmful effects acc. to our experiences and available information.

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SECTION 3: Composition/information on ingredients**3.2. Mixtures****Relevant ingredients**

| CAS No | Chemical name | | | Quantity |
|-------------|--|----------|------------------|--------------|
| | EC No | Index No | REACH No | |
| | Classification (GB CLP Regulation) | | | |
| 161075-00-9 | Hexafluoropropene, oxidized, oligomers, reduced, fluorinated | | | 80 - < 100 % |
| | 500-537-5 | | 01-2119970717-25 | |
| | Aquatic Chronic 4; H413 | | | |

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Chemical name | Quantity |
|-------------|-----------|---|--------------|
| | | Specific Conc. Limits, M-factors and ATE | |
| 161075-00-9 | 500-537-5 | Hexafluoropropene, oxidized, oligomers, reduced, fluorinated | 80 - < 100 % |
| | | inhalation: LC50 = > 94700 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg | |

Further Information

Classification system: The classification corresponds to the current EC lists and is completed by information from specialist literature and company information. Perfluoropolyether with additives.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Self-protection of the first aider. Change contaminated clothing. Do not put any product-impregnated cleaning rags into your trouser pockets.

After inhalation

Provide fresh air. Seek medical attention if problems persist.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Remove/Take off immediately all contaminated clothing. In case of skin irritation, seek medical treatment.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Do NOT induce vomiting.

Rinse mouth thoroughly with water. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Foam. Extinguishing powder. Carbon dioxide (CO2).

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Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixtureIn case of fire may be liberated: Hydrogen fluoride. Carbon monoxide. Carbon dioxide (CO₂).**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

Additional information

Co-ordinate fire-fighting measures to the fire surroundings. Use water spray jet to protect personnel and to cool endangered containers. In case of fire and/or explosion do not breathe fumes. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

High slip hazard because of leaking or spilled product. Remove all sources of ignition. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3. Methods and material for containment and cleaning up**Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Section 12: Ecological Information (non-mandatory)

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Avoid oil mist. Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

Advice on general occupational hygiene

Wash hands before breaks and after work. Take off immediately all contaminated clothing. Wash contaminated clothing prior to re-use. Do not eat, drink, smoke or sneeze at the workplace.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep the packing dry and well sealed to prevent contamination and absorption of humidity. Keep container tightly closed in a cool place. Keep/Store only in original container.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Keep away from: Oxidizing agent.

Further information on storage conditions

Protect against: UV-radiation/sunlight. frost. heat.

Recommended storage temperature: 5 - 30°C

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7.3. Specific end use(s)

Further information: see technical data sheet.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****DNEL/DMEL values**

| CAS No | Substance | Exposure route | Effect | Value |
|--------------------------|--|----------------|------------------------|-------|
| DNEL type | | | | |
| 161075-00-9 | Hexafluoropropene, oxidized, oligomers, reduced, fluorinated | | | |
| Worker DNEL, long-term | inhalation | systemic | 3088 mg/m ³ | |
| Consumer DNEL, long-term | inhalation | systemic | 2304 mg/m ³ | |

PNEC values

| CAS No | Substance | Value |
|---------------------------|--|-------|
| Environmental compartment | | |
| 161075-00-9 | Hexafluoropropene, oxidized, oligomers, reduced, fluorinated | |
| Freshwater | 0,000208 mg/l | |
| Marine water | 0,000021 mg/l | |
| Freshwater sediment | 0,11515 mg/kg | |
| Marine sediment | 0,01151 mg/kg | |
| Secondary poisoning | 33 mg/kg | |
| Soil | 0,18371 mg/kg | |

Additional advice on limit values

Does not contain substances above concentration limits fixing an occupational exposure limit.

8.2. Exposure controls**Appropriate engineering controls**

Provide adequate ventilation as well as local exhaust at critical locations.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN): EN 166

Hand protection

Tested protective gloves are to be worn: German Industry Norms (DIN) / European Norms (EN): EN ISO 374

Duration of wearing with permanent contact: 480 min

Suitable material: NBR (Nitrile rubber).

Thickness of glove material: 0.7 mm.

Wearing time with occasional contact (splashes): 30 min

Suitable material: NBR (Nitrile rubber).

Thickness of glove material: 0.4 mm

Protect skin by using skin protective cream.

Unsuitable material: Thick material.

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Skin protection

Wear suitable protective clothing. Change contaminated clothing. Do not put any product-impregnated cleaning rags into your trouser pockets.

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Breathing protection with filter against organic gases and vapours type A - boiling point > 65°C: A1: < 1000 ppm; A2: < 5000 ppm; A3: < 10000 ppm

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | | |
|---|-------------------|-------------|
| Physical state: | liquid | |
| Colour: | colourless | |
| Odour: | odourless | |
| Odour threshold: | not determined | |
| | | Test method |
| Melting point/freezing point: | No data available | |
| Boiling point or initial boiling point and boiling range: | 55 °C | |
| Flammability: | No data available | |
| Lower explosion limits: | No data available | |
| Upper explosion limits: | No data available | |
| Flash point: | not applicable | |
| Auto-ignition temperature: | not determined | |
| Decomposition temperature: | >290 °C | |
| pH-Value: | not applicable | |
| Viscosity / kinematic: (at 20 °C) | 0,45 mm²/s | |
| Water solubility: | insoluble | |
| Solubility in other solvents | | |
| No data available | | |
| Partition coefficient n-octanol/water: | No data available | |
| Vapour pressure: | No data available | |
| Density (at 20 °C): | 1,68 g/cm³ | DIN 51757 |
| Relative vapour density: | No data available | |
| Particle characteristics: | No data available | |

9.2. Other information

Information with regard to physical hazard classes

| | |
|---------------------------|-------------------|
| Explosive properties | |
| No data available | |
| Self-ignition temperature | |
| Solid: | No data available |
| Gas: | No data available |
| Oxidizing properties | |
| No data available | |

Other safety characteristics

| | |
|-------------------|----------------------|
| Evaporation rate: | No data available |
| Pour point: | -110 °C ASTM D 97-66 |

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable under storage at normal ambient temperatures.

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10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Do not overheat to avoid decomposition by heat.

Refer to chapter 7 No further action is necessary.

10.5. Incompatible materials

none

10.6. Hazardous decomposition products

In case of fire may be liberated: Hydrogen fluoride. Carbon monoxide. Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

| CAS No | Chemical name | | | | |
|-------------|--|-------------------|---------|---------------------|--------------------|
| | Exposure route | Dose | Species | Source | Method |
| 161075-00-9 | Hexafluoropropene, oxidized, oligomers, reduced, fluorinated | | | | |
| | oral | LD50 > 5000 mg/kg | Rat | Study report (1992) | OECD Guideline 401 |
| | dermal | LD50 > 2000 mg/kg | Rat | Study report (2006) | OECD Guideline 402 |
| | inhalation (4 h) vapour | LC50 > 94700 mg/l | Rat | Study report (1997) | OECD Guideline 403 |

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

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.

11.2. Information on other hazards

Endocrine disrupting properties

not applicable

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SECTION 12: Ecological information

12.1. Toxicity

May cause long lasting harmful effects to aquatic life.

| CAS No | Chemical name | | | | | |
|-------------|--|----------------------|-----------|----------------------------|----------------------------|--------------------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 161075-00-9 | Hexafluoropropene, oxidized, oligomers, reduced, fluorinated | | | | | |
| | Acute fish toxicity | LC50 > 100 mg/l | 96 h | Danio rerio | REACH Registration Dossier | OECD Guideline 203 |
| | Acute bacteria toxicity | EC50 > 1000 mg/l () | 0,5 h | activated sludge, domestic | Study report (2013) | OECD Guideline 209 |

12.2. Persistence and degradability

Not easily bio-degradable (according to OECD-criteria). Do not allow to enter into surface water or drains.

12.3. Bioaccumulative potential

No data available

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|-------------|--|---------|
| 161075-00-9 | Hexafluoropropene, oxidized, oligomers, reduced, fluorinated | 5,58 |

12.4. Mobility in soil

Due to its low solubility in water the product is almost completely mechanically separated in biological waste water treatment plants.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No data available

Further information

Do not allow uncontrolled leakage of product into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Must not be disposed of with domestic refuse. Do not allow to enter into surface water or drains.

List of Wastes Code - residues/unused products

140602 WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (EXCEPT 07 AND 08); waste organic solvents, refrigerants and foam/aerosol propellants; other halogenated solvents and solvent mixtures; hazardous waste

Contaminated packaging

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Packing which cannot be properly cleaned must be thrown away. Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: -

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- 14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:
- -
-
- Inland waterways transport (ADN)
- 14.1. UN number or ID number:

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:
- -
-
-
- Marine transport (IMDG)
- 14.1. UN number or ID number:

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:
- -
-
-
- Air transport (ICAO-TI/IATA-DGR)
- 14.1. UN number or ID number:

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:
- -
-
-
- 14.5. Environmental hazards
- ENVIRONMENTALLY HAZARDOUS: No
- 14.6. Special precautions for user
- Unless specified otherwise, general measures for safe transport must be followed.
- 14.7. Maritime transport in bulk according to IMO instruments
- not applicable
- Other applicable information
- No dangerous good in sense of these transport regulations.

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
- EU regulatory information
- Restrictions on use (REACH, annex XVII):
- Entry 3
- Directive 2004/42/EC on VOC in 100%
- paints and varnishes:
- National regulatory information
- Water hazard class (D): 1 - slightly hazardous to water
- 15.2. Chemical safety assessment
- Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

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| | | |
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Abbreviations and acronyms

Aquatic Chronic: Chronic aquatic hazard
 For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).
 ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ASTM - American Society for the Testing of Materials; ATE - Acute Toxicity Estimates; bw - Body weight; CAO - Cargo Aircraft Only; CAS - Chemical Abstracts Service; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DNEL - Derived No-Effect Level; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); EG - European Union; EN - European standards; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n;o;s; - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; OECD - Organization for Economic Co-operation and Development; PBT - Persistent, Bioaccumulative and Toxic substance; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID -Regulation concerning the International Carriage of Dangerous Goods by Rail; RQ - Reportable Quantity; SADT - Self- Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Classification for mixtures and used evaluation method according to GB CLP Regulation

| | |
|-------------------------|--------------------------|
| Classification | Classification procedure |
| Aquatic Chronic 4; H413 | Calculation method |

Relevant H and EUH statements (number and full text)

H413 May cause long lasting harmful effects to aquatic life.

Further Information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)