



Safety Data Sheet

F4

Revision Date: 09.12.14 according to regulation 1907/2006/EC

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1 Identification of the substance/preparation and company/ undertaking

Product name: F4

Uses: Lubricant/ Operating Fluid

**Manufacturer/
Supplier:** Pfeiffer Vacuum GmbH
Berliner Strasse 43
D-35614 Asslar
Telefon 06441/802-0
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**Emergency tele-
phone number:** +49-(0) 6441/802-67222

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2 Hazards identification

**Hazard descrip-
tion:** Not applicable.

**Information con-
cerning particular
hazards for
human and
environment:** Not applicable.

3 Composition/information on ingredients

Chemical characterization

CAS No. perfluorinated polyether oil
Description:

Identification number(s)

EINECS Number: Polymer

4 First-aid measures

After inhalation:	Supply fresh air; consult doctor in case of complaints.
After skin contact:	Wash off with soap and plenty of water.
After eye contact:	Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing:	If symptoms persist consult doctor.

5 Fire-fighting measures

Suitable extinguishing agents:	Use fire extinguishing methods suitable to surrounding conditions.
Special hazards caused by the substance, its products of combustion or resulting gases:	In case of fire, the following can be released: traces of fluorinated products.
Protective equipment:	Do not inhale explosion gases or combustion gases. Standard procedure for chemical fires.
Additional information:	Cool endangered receptacles with water spray. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

Person-related safety precautions:	Not required.
Measures for environmental protection:	Do not allow to enter sewers/ surface or ground water.
Measures for cleaning/collecting:	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of the material collected according to regulations.

7 Handling and storage

Handling

Information for safe handling:	No special measures required. Prevent formation of aerosols.
Information about fire - and explosion protection:	No special measures required.

Storage

Requirements to be met by storerooms and receptacles: Store in cool, dry conditions in well sealed receptacles.

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions: None.

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace: Not required.

Additional information: The lists valid during the making were used as basis.

Personal protective equipment

General protective and hygienic measures: Immediately remove all soiled and contaminated clothing. Avoid close or long term contact with the skin. Be sure to clean skin thoroughly after work and before breaks. Keep away from tobacco products.

Respiratory protection: Not required.

Protection of hands: Preventive skin protection by use of skin-protecting agents is recommended.

Eye protection: Not required.

9 Physical and chemical properties

General Information

Form	Fluid
Colour	Colourless
Odour	Odourless
Change in condition Pour point	< -50°C (DIN ISO 3016)

Flash point	not applicable
Danger of explosion	Product does not present an explosion hazard
Density at 20°C	1,9 g/cm ³ (DIN 51757)
Solubility in / Miscibility with water	Insoluble
Viscosity Kinematic at 40°C	~ 60 mm ² /s (DIN 51562)

10 Stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

Dangerous reactions: No dangerous reactions known.

Dangerous decomposition products: > 280°C danger of forming toxic pyrolysis products.

11 Toxicological information

Additional toxicological information: Prolonged skin contact may cause skin irritation and/or dermatitis.

12 Ecological information

Ecotoxicological effects

Behaviour in sewage processing plants: The product can be mechanically separated.

General notes: Do not allow product to reach ground water, water course or sewage system.

13 Disposal considerations

Product

Recommendation: Can be incinerated in accordance with local and national regulations.

Waste disposal key: For this product no waste disposal key according the European Waste Catalogue (EWC) can be determined, as only the purpose of application defined by the user enables an allocation. The waste code number has to be determined in accordance with the local waste disposer.

Uncleaned packaging:

Recommendation: Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

14 Transport information**Land transport ADR/RID (cross-border)**

ADR/RID class: -

Maritime transport IMDG:

IMDG class: -

Air transport ICAO-TI and IATA-DGR

ICAO/IATA class: -

Transport/Additional information

Not classified as dangerous according to the above specifications.

15 Regulatory information

Labelling according to EU guidelines: The substance is not subject to classification according to EU lists and other sources of literature known to us.

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.

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