

Trade name: Fluorinated Fomblin FM 090 Revision date: 31.03.2014
Part number: Date of print: 11.10.2016

Version 1.0.0

I Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Fluorinated Fomblin FM 090 / ULTRATHERM

1.2 Relevant identified uses of the substance or mixture and uses advised against relevant identified uses (Product categories [PC]

PC24 - Lubricants, greases, release products

1.3 Details of the supplier of the safety data sheet

Supplier: INFICON AG

Street: Alte Landstrasse 6
Postal code/city: LI-9496 Balzers
Phone: 00423 / 388 3111

E-Mail: reach.liechtenstein@inficon.com

1.4 Emergency Telephone Number (worldwide)

Tox Info Suisse +41 44 251 51 51 (24 hours)

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC

None

Classification according to Regulation (EC) No. 1272/2008 [CLP]

None

2.2 Label elements

None

2.3 Other hazards

None



3 Composition/information on ingredients

3.1 Mixtures

Hazardous ingredients

None

Further ingredients

PFPE oil (Perfluoropolyethers), PTFE powder (Polytetrafluoroethylen), Molybdenum disulphide; EC No. : 215-2363-9

CAS No.:1317-33-5

4 First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice

After inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. In case of respiratory tract irritation, consult a physician.

In case of skin contact

Change contaminated, saturated clothing. Wash immediately with; Water and soap. In case of skin irritation, consult a physician

After eye contact

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Get medical advice/attention if you feel unwell.

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

None



5 Firefighting measures

The product itself does not burn. Reactions with combustible materials possible

5.1 Extinguishing media

Suitable extinguishing media

Dry extinguishing powder. Carbo dioxide (CO2). ABC-powder BC-powder foam. Dry sand

Unsuitable extinguishing media

Water Strong water jet. High power water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Gases/vapours, corrosive. Very toxic by inhalation. Pyrolysis products, toxic, containing fluorine. Hydrogen fluoride. Sulphur dioxide (SO2)

5.3 Advice for firefighters

Use suitable breathing apparatus

Special protective equipment for firefighters

In case of fire: Wear self-contained breathing apparatus

5.4 Additional information

Collect contaminated fire extinguishing water separately. This must not be discharged into drains

6 Accidental release measures

Special danger of slipping by leaking/spilling product. Keep away from sources of ignition. - No smoking!

6.1 Personal precautions, protective equipment and emergency procedures

None

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Ensure waste is collected and contained, e.g. in sump pallets or kerbed areas.

6.3 Methods and material for containment and cleaning up

Take up mechanically, plaxing in appropriate containers for disposal. Soak up inert absorbent and dispose as waste requiring special attention. Suitable material for taking up; Universal binder Kieselguhr.

6.4 Reference to other sections

None



7 Handling and storage



7.1 Precautions for safe handling

It is recommended to design all work processes always so that the following is excluded: Generation/formation of mist. Avoid: Inhalation of vapours or spray7mists Skin contact Eye contact. When using do not eat, drink, smoke, sniff.

7.2 Conditions for safe storage, including any incompatibilities

Hints on joint storage

Storage class: 13 Storage class (TRGS 510): 13

Keep away from

Food and feedingstuffs

Further information on storage conditions

Keep/Store only in original vontainer. Keep container Tightly closed. Protect against Humidity. Dust deposits

7.3 Specific end use(s)

None

8 Exposure controls/personal protection

Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and after work. Separate storage of work clothes. Take the precautions customary when handling chemicals

8.1 Control parameters

None

8.2 Exposure controls

Personal protection equipment

Eye / face protection

Eye protection: not applicable. Avoid: Eye contact

Recommended eye protection articles

DIN EN 166



Skin protection

Hand protection is not required

By long-term hand contact: Wear suitable gloves

Suitable material: NBR (Nitrile rubber). Butyl caoutchouc (butyl rubber)

Recommended glove articles: DIN EN 374, DIN EN 420

Respiratory protection

No special measures are necessary. Avoid: Inhalation of vapours or spray/mists

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Colour

black

Safety relevant basis data

Physical state: pasty

Boiling temperature / range: (1013 hPa) 330°C Decomposition temperature: (1013 hPa) 290°C Flash point: (1013 hPa) none Vapour pressure: (50°C) 0.01 hPa << (20°C) Density: 2 g/cm3

9.2 Other information

None

10 Stability and reactivity

10.1 Reactivity

No information available

10.2 Chemical stability

The product is stable

10.3 Possibility of hazardous reactions

Alkali metals, Alkaline earth metal. Powdered metals. Lewis-acid

10.4 Conditions to avoid

No information available



10.5 Incompatible materials

No information available

10.6 Hazardous decomposition products

Carbon monoxide. Carbon dioxide (CO2), Pyrolysis products, toxic, containing fluorine. Hydrogen fluoride. Sulphur dioxide (SO2)

11 Toxicological information

This products is unlikely to harm health, given normal and proper handling and hygenic precautions

11.1 Information on toxicological effects

By analogy

Acute effects

Acute oral toxicity

Parameter: LD50
Exposure route: Oral
Species: Rat

Effective dose: > 5000 mg/kg

Acute inhalation toxicity

Parameter: LD50
Exposure route: Dermal
Secies: Rabbit

Effective dose: > 11000 mg/kg

Exposure time: -



12 Ecological information

Discharge into the environment must be avoided

12.1 Toxicity

By analogy

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter: LC50

Species: Pimephales promelas (fathead minnow)

Effective dose: = 1250 mg/l

Exposure time: 96 h

12.2 Persistence and degradability

Biodegradation

The product is difficult to biologically degrade

12.3 Bioaccumulative potential

No information available

12.4 Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

No information available

12.6 Other adverse effects

No information available

12.7 Further ecological information

Additional information

According to ist fomulatio, the product contains the following substances of Directive 76/464/EEC

MOLYBDENUM COMPOUNDS. INSOLUBLE

12.8 Overall evaluation

If product enters soil, it will be mobile and may contaminate groundwater. In accordance with the required stability the product is poorly biodegradable



13 Disposal considerations

Dispose according to legislation. The allocation of waste identity/numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

13.1 Waste treatment methods

Send to a hazardous waste incinerator facility under observation of official regulations. Collect the waste separately. Evidence for disposal must be provided.

14 Transport information

14.1 UN number

No dangerous goods in sense of this transport regulation

14.2 UN proper shipping name

No dangerous goods in sense of this transport regulation

14.3 Transport hazard class(es)

No dangerous goods in sense of this transport regulation

14.4 Packing group

No dangerous goods in sense of this transport regulation

14.5 Environmental hazards

No dangerous goods in sense of this transport regulation

14.6 Special precautions for user

None

15 Regulatory Information

15.1 Safety, health and environmenta tegulations/legislation specific for the substance or mixture

National regulations

Water hazard class (WGK)

Class: 1 (Slightly hazardous to water) Classification according to VwVwS

15.2 Chemical safety assessment

No information available



16 Other informations

16.1 Indication of changes

None

16.2 Abbrevations and acronyms

None

16.3 Key literature references and sources for data

None

16.4 Relevant R-, H- and EUH-phrases (Number and full text)

None

16.5 Training advice

None

16.6 Additional information

None

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 the safety data sheet is not necessarily valid for the new made-up material.