# according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : OLAFIRN - Multi-Fluorosilicate Treatment

(OLAFIRN - MEHRFACH-FLUAT)

 Article number :
 0146\_000
 Version (Revision) :
 6.1.0 (6.0.0)

 Revision date :
 12.11.2019
 Print date :
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## SECTION 1: Identification of the substance/mixture and of the company/ undertaking

#### 1.1 Product identifier

OLAFIRN - Multi-Fluorosilicate Treatment (OLAFIRN - MEHRFACH-FLUAT) (0146\_\_000)

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

#### Relevant identified uses

**Products Category [PC]** 

PC20 - PC 20 - Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents

Sectors of use [SU]

SU21 - Consumer uses: Private households (= general public = consumers)

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

## 1.3 Details of the supplier of the safety data sheet

# Supplier (manufacturer/importer/only representative/downstream user/distributor)

PUFAS Werk KG

**Street:** Im Schedetal 1

Postal code/city: 34346 Hann. Münden

**Telephone:** +49 (0)5541 7003-01 **Telefax:** +49 (0)5541 7003-50 **Information contact:** 

E-mail (competent person): sds@pufas.de

Website: www.pufas.de

# 1.4 Emergency telephone number

+49 (0)5541 7003-41/-64

Only available during office hours (Mo-Th 8 - 16 h, Fr 8 - 12.30 h).

# **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

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

Acute Tox. 4; H302 - Acute toxicity (oral): Category 4; Harmful if swallowed.

Eye Dam. 1; H318 - Serious eye damage/eye irritation: Category 1; Causes serious eye damage.

Skin Corr. 1C; H314 - Skin corrosion/irritation: Category 1C; Causes severe skin burns and eye damage.

Met. Corr. 1; H290 - Corrosive to metals: Category 1; May be corrosive to metals.

# 2.2 Label elements

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

# **Hazard pictograms**





Corrosion (GHS05) · Exclamation mark (GHS07)

## Signal word

Danger

## Hazard components for labelling

MAGNESIUM HEXAFLUOROSILICATE; CAS No.: 16949-65-8

FLUOROSILIC ACID ; CAS No. : 16961-83-4

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#### **Hazard statements**

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H302 Harmful if swallowed.

#### **Precautionary statements**

P102 Keep out of reach of children.

P262 Do not get in eyes, on skin, or on clothing. P280 Wear protective gloves/eye protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P302+P352 IF ON SKIN: Wash with plenty of water and soap.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P101 If medical advice is needed, have product container or label at hand.

P234 Keep only in original packaging.

P501 Dispose of contents/container in accordance with local/regional/national regulations of waste

disposal.

#### 2.3 Other hazards

None

# **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

#### Description

Consists of: Magnesium- and zinc hexafluorosilicate, fluorosilic acid and water

## **Hazardous ingredients**

MAGNESIUM HEXAFLUOROSILICATE; REACH No.: 01-2119980031-47; EC No.: 241-022-2; CAS No.: 16949-65-8

Weight fraction :  $\geq$  10 - < 15 % Classification 1272/2008 [CLP] : Acute Tox. 3 ; H301

ZINC HEXAFLUOROSILICATE; REACH No.: 01-2120770489-39; EC No.: 240-894-1; CAS No.: 16871-71-9

Weight fraction :  $\geq$  5 - < 10 % Classification 1272/2008 [CLP] : Acute Tox. 4 ; H302

FLUOROSILIC ACID; REACH No.: 01-2119488906-19; EC No.: 241-034-8; CAS No.: 16961-83-4

Weight fraction :  $\geq 4 - < 5\%$ 

Classification 1272/2008 [CLP]: Skin Corr. 1B; H314 Eye Dam. 1; H318

#### **Additional information**

Full text of H- and EUH-phrases: see section 16.

# **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

## **General information**

Notice the directions for use on the label. When in doubt or if symptoms are observed, get medical advice. Change contaminated, saturated clothing.

# Following inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician.

## In case of skin contact

After contact with skin, wash immediately with plenty of 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.

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## After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Call a physician in any case!

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

There are no more informations available on the mixture itself.

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

There are no more informations available on the mixture itself.

# **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

# Suitable extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

## 5.2 Special hazards arising from the substance or mixture

# **Hazardous combustion products**

In case of fire may be liberated: Hydrogen fluoride

## 5.3 Advice for firefighters

## **Special protective equipment for firefighters**

Do not inhale explosion and combustion gases. In case of fire: Wear self-contained breathing apparatus.

#### **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

The usual precautionary measures for the handling of chemicals have to be observed. Avoid other acids - danger of building of HF.

#### 6.2 Environmental precautions

Do not allow to enter into surface water or drains.

# 6.3 Methods and material for containment and cleaning up

## For containment

Soak up inert absorbent and dispose as waste requiring special attention. Do not dry up the product.

# 6.4 Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

## **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

#### **Protective measures**

Normal precautions taken when handling chemicals should be observed. Avoid contact with skin and eyes. Keep away from food, drink and animal feeding stuffs.

#### Measures to prevent fire

No special measures are necessary.

# 7.2 Conditions for safe storage, including any incompatibilities

# Requirements for storage rooms and vessels

Keep/Store only in original container. Keep container tightly closed.

#### Materials to avoid

Acid

## Further information on storage conditions

Do not store outside. Always keep in containers of same material as the original one. See also instructions on the label. Avoid heating and direct sunlight. Please note safety instructions and directions for use on the drum.

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**Do not store at temperatures below :** Avoid cooling to under 0°C.

## 7.3 Specific end use(s)

## Recommendation

Observe technical data sheet.

# **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

# Occupational exposure limit values

None

## 8.2 Exposure controls

## **Personal protection equipment**

# Eye/face protection

Suitable eye protection

goggles

## Skin protection

#### Hand protection

By long-term hand contact: siehe unten

Suitable material: Butyl caoutchouc (butyl rubber)

Required properties: Chemical protective gloves according to DIN EN 374 with CE marking.

Check protective gloves prior to each use for damage (cracks, holes, cuts). Do not wear protective gloves longer

than necessary

After use of protective gloves, use skin cleansing and skin care products.

Breakthrough time (maximum wearing time): >=480 min

Thickness of the glove material: 0,7 mm

**Body protection** 

Wearing of closed working clothes. Remove contaminated, saturated clothing.

## Respiratory protection

## Suitable respiratory protection apparatus

Respiratory protection necessary at: spray application

# Recommended respiratory protection articles

B-P2/3 or ABEK-P2/3

## **General information**

The usual precautionary measures for the handling of chemicals have to be observed. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff.

## **Environmental exposure controls**

See also section 6 and 12.

# **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

#### **Appearance**

Physical state : Liquid Colour : colourless

Odour

odourless

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## Safety characteristics

**Melting point/freezing point :** ( 1013 hPa ) No data available

Initial boiling point and boiling (1013 hPa) > 100 °C

range:

**Flash point :** none Brookfield

 Auto-ignition temperature :
 none

 Lower explosion limit :
 none

 Upper explosion limit :
 none

 Vapour pressure :
 (50 °C)
 approx.
 123,5
 hPa

 Density :
 (20 °C)
 1,13
 g/cm³

Density: $(20 \, ^{\circ}\text{C})$ 1,13Solvent separation test: $(20 \, ^{\circ}\text{C})$ noneWater solubility: $(20 \, ^{\circ}\text{C})$ soluble

**pH:** approx. 2 **Flow time:** (23 °C) < 11 s ISO cup 6 mm

Viscosity: (20 °C) not determined Cinematic viscosity: (40 °C) not relevant

**VOC-value :** < 1 g/l

## 9.2 Other information

None

# **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

No information available.

#### 10.2 Chemical stability

Stable under recommended storage and handling conditions (see section 7).

# 10.3 Possibility of hazardous reactions

No information available.

## 10.4 Conditions to avoid

No information available.

# 10.5 Incompatible materials

Acid, concentrated. Alkali metals

# 10.6 Hazardous decomposition products

Hydrofluoric acid.

# **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

# **Acute toxicity**

Harmful if swallowed.

# **Specific effects (Longterm animal experiment)**

No data available

# Corrosion

Causes severe skin burns and eye damage.

# Respiratory or skin sensitisation

No data available

# Repeated dose toxicity (subacute, subchronic, chronic)

No data available

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# CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

# Carcinogenicity

No data available

#### Germ cell mutagenicity

No data available

#### Reproductive toxicity

No data available

# **STOT-single exposure**

No data available

# **STOT-repeated exposure**

No data available

# Aspiration hazard

No data available

# 11.5 Additional information

This product is unlikely to harm health, given normal and proper handling and hygienic precautions.

# **SECTION 12: Ecological information**

## 12.1 Toxicity

No information available.

## **Effects in sewage plants**

Technically correct releases of minimal concentrations to adapted biological sewage plants, will not disturb the biodegradability of activated sludge.

# 12.2 Persistence and degradability

No information available.

## 12.3 Bioaccumulative potential

No information available.

# 12.4 Mobility in soil

No information available.

## Adsorption

#### 12.5 Results of PBT and vPvB assessment

No information available.

# 12.6 Other adverse effects

No information available.

# 12.7 Additional ecotoxicological information

# Additional information

Do not allow to enter into surface water or drains.

# **SECTION 13: Disposal considerations**

## 13.1 Waste treatment methods

## Product/Packaging disposal

Dispose according to legislation. Handle contaminated packages in the same way as the substance itself.

# Waste codes/waste designations according to EWC/AVV

Waste code product

06 01 06

## Waste name

other acids

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Waste code packaging

15 01 02 **Waste name**plastic packaging

# **SECTION 14: Transport information**

## 14.1 UN number

UN 2922

## 14.2 UN proper shipping name

Land transport (ADR/RID)

CORROSIVE LIQUID, TOXIC, N.O.S. (FLUOROSILIC ACID)

Sea transport (IMDG)

CORROSIVE LIQUID, TOXIC, N.O.S. (FLUOROSILICIC ACID)

Air transport (ICAO-TI / IATA-DGR)

CORROSIVE LIQUID, TOXIC, N.O.S. (FLUOROSILIC ACID)

# 14.3 Transport hazard class(es)

Land transport (ADR/RID)

Class(es): 8
Classification code: CT1
Hazard identification number (Kemler
No.): 86
Tunnel restriction code: E
Special provisions: LQ 5 | E 1
Hazard label(s): 8 / 6.1

Sea transport (IMDG)

**Class(es):** 8 **EmS-No.:** F-A / S-B

**Special provisions :** LQ 5 l · E 1 · IMDG-Code segregation group 1 - Acids · IMDG-Code segregation group 7 - Heavy metal and their salts (including their organometallic compounds)

Hazard label(s): 8 / 6.1

Air transport (ICAO-TI / IATA-DGR)

Class(es): 8 / 6.1
Special provisions: E 1
Hazard label(s): 8

14.4 Packing group

Land transport (ADR/RID): III Sea transport (IMDG): I

Air transport (ICAO-TI / IATA-DGR): III

14.5 Environmental hazards

Land transport (ADR/RID): No Sea transport (IMDG): No

Air transport (ICAO-TI / IATA-DGR): No

# 14.6 Special precautions for user

None

# 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

# 14.8 Additional information

The ADR-classification is not applying to our assembled packing (see ADR 3.4. LQ 5 I) => limited Quantity

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# **SECTION 15: Regulatory information**

# Safety, health and environmental regulations/legislation specific for the substance or mixture

**EU legislation** 

Other regulations (EU)

Labelling for contents according to regulation (EC) No. 648/2004

- this product is not subject to EC Detergent regulation no. 648/2004.

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds

- out of scope

# 15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

#### 15.3 Additional information

None

## **SECTION 16: Other information**

# 16.1 Indication of changes

14. Transport information

## 16.2 Abbreviations and acronyms

None

# 16.3 Key literature references and sources for data

None

# Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

No information available.

# 16.5 Relevant H- and EUH-phrases (Number and full text)

H290 May be corrosive to metals. H301 Toxic if swallowed. H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

# 16.6 Training advice

None

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

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