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

Trade name : Olafirn MF - Multi-Fluorosilicate Treatment

(Mehrfach-Fluat Olafirn MF)

 Revision date :
 05.01.2023
 Version (Revision) :
 6.1.0 (6.0.0)

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 05.01.2023
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 0146__000

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

Olafirn MF - Multi-Fluorosilicate Treatment (Mehrfach-Fluat Olafirn MF) (0146__000)

Unique Formula Identifier: 54PA-12RK-GC19-JEW5

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

Relevant identified uses

Sectors of use [SU]

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

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

Products Category [PC]

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

1.3 Details of the supplier of the safety data sheet

Supplier

PUFAS Werk KG // decotric GmbH

Street: Im Schedetal 1

Postal code/City: D - 34346 Hann. Münden

Telephone: +495541 7003-01//-02

Telefax: +4955417003-50

Information contact: sds@pufas.de // sds@pufas.de // sds@pufas.de // sds@pufas.de // sds@decotric.de

Homepage: www.pufas.de // www.decotric.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]

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

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

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

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

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

This mixture does not contain any substances classified as PBT/vPvB or included in the SVHC-Candidate List. This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

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

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Follow the instructions 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.

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After eye contact

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

Following 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.

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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.

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

No information available.

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: >=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: Liquid

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Appearance

Physical state: Liquid Colour: colourless

Odour

odourless

Safety characteristics

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

Initial boiling point and boiling (1013 hPa) > 100

range:

Flash point: none Brookfield

Auto-ignition temperature : none Lower explosion limit: none Upper explosion limit: none Vapour pressure : (50°C) hPa 123,5 approx. Density: (20°C) 1,13 g/cm³ Solvent separation test : (20°C) none Water solubility: (20°C) soluble pH: approx. 2

Flow time: (23 °C) < 11 s ISO cup 6 mm

Viscosity:($20 \, ^{\circ}\text{C}$)not determinedCinematic viscosity:($40 \, ^{\circ}\text{C}$)not relevant

VOC-value:

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 hazard classes as defined in Regulation (EC) No 1272/2008 Acute toxicity

Harmful: possible risk of irreversible effects if swallowed.

Acute oral toxicity

Parameter: ATE (MAGNESIUM HEXAFLUOROSILICATE ; CAS No. : 16949-65-8)

Exposure route : Oral Effective dose : 100 mg/kg

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Parameter: ATE (ZINC HEXAFLUOROSILICATE ; CAS No. : 16871-71-9)

Exposure route : Oral
Effective dose : 500 mg/kg

Specific effects (Longterm animal experiment)

No data available

Corrosion

Causes severe skin burns and eye damage.

Respiratory or skin sensitisation

No information available.

Repeated dose toxicity (subacute, subchronic, chronic)

No data available

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No information available.

Germ cell mutagenicity

No information available.

Reproductive toxicity

No information available.

STOT-single exposure

No information available.

STOT-repeated exposure

No information available.

Aspiration hazard

No information available.

11.2 Information on other hazards

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.

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.

Aquatic toxicity

No information available.

Sewage treatment plant

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.

12.5 Results of PBT and vPvB assessment

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

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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 information available.

12.8 Additional ecotoxicological information

Additional information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Directive 2008/98/EC (Waste Framework Directive)

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

After intended use

Waste codes/waste designations according to EWC/AVV

Waste code product :

06 01 06

Waste name product :

other acids

Waste code packaging:

15 01 02

Waste name packaging:

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 $5 \mid \cdot \mid E \mid 1$ **Hazard label(s) :** $8 \mid 6.1$

Sea transport (IMDG)

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

Special Provisions : LQ 5 | · 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

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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 Maritime transport in bulk according to IMO instruments

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

SECTION 15: Regulatory information

$_{\rm 15.1}$ Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation

Other regulations (EU)

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

- out of scope

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

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

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

02. Label elements · 14. Transport information · 15. Restrictions on use

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

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16.2 Abbreviations and acronyms

Registration, evaluation, authorisation of chemicals (Registrierung, Bewertung und Zulassung von

Chemikalien).

CLP Classification, labelling and packaging (Einstufung, Kennzeichnung und Verpackung)

CAS Chemical Abstracts Service

EINECS European Inventory of Existing Chemical Substances (Europäisches Verzeichnis der vorhandenen chemischen Stoffe).

ELINCS European List of Notified Chemical Substances.

Acute toxicity estimates (Schätzwert akuter Toxizität)

LD50 Lethal dose, 50 percent (letale Dosis, 50 Prozent)

LC50 Lethal concentration, 50 percent (letale Konzentration, 50 Prozent)

ECxx Effect concentration, xx percent

NOEC No Observed Effect Concentration

PBT Persistent, bioaccumulating and toxic (persistent, bioakkumulierend und toxisch)

very persistent and very bioaccumulative (sehr persistent und sehr bioakkumulierend)

Specific target organ toxicity (Spezifische Zielorgantoxizität). STOT

European agreement concerning the international carriage of dangerous goods by road (Europäische ADR

Übereinkommen über die internationale Beförderung gefährlicher Güter auf der Straße)

International maritime dangerous goods code (Internationaler Code für die Beförderung gefährlicher Güter mit **IMDG**

Seeschiffen)

IATA International air transport association (Internationale Flug-Transport-Vereinigung)

International maritime organisation declaration (Beförderungspapier für den Transport gefährlicher Güter auf IMO

16.3 Key literature references and sources for data

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

See SECTION 2.1 (classification).

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

H301 Toxic if swallowed H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious 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.