

Basfoliar® Ferro Top SL



Version: 2.10
Date of last issue: 23.12.2022
Date of first issue: 24.03.2016

Revision Date:
06.04.2023

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

1.1 Product identifier

Trade name : Basfoliar® Ferro Top SL
UFI : 36U2-Y0N3-D00H-5TTW

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

Use of the : Fertilizer
Substance/Mixture

1.3 Details of the supplier of the safety data sheet

Company : COMPO EXPERT GmbH
Krögerweg 10
D-48155 Münster
Telephone : +49 (0) 251 29 79 81 – 000
Telefax : +49 (0) 251 29 79 81 - 111
E-mail address of person : info@compo-expert.com
responsible for the SDS

1.4 Emergency telephone number

GBK GmbH - Global Regulatory Compliance - 24h
Telephone: +49 (0) 6132 - 84463

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin corrosion/irritation, Category 2 H315: Causes skin irritation.

Serious eye damage/eye irritation, H318: Causes serious eye damage.
Category 1

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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Hazard pictograms

:



Signal word

: Danger

Hazard statements

: H315
H318

Causes skin irritation.
Causes serious eye damage.

Precautionary statements

: P101

If medical advice is needed, have product container or label at hand.

P102

Keep out of reach of children.

Prevention:

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection.

P284

In case of inadequate ventilation wear respiratory protection.

Response:

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310

Immediately call a POISON CENTER or doctor/ physician.

2.3 Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature

: Liquid mixture of organic and inorganic salts of fertilizers.

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
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iron sulphate	7720-78-7	Acute Tox. 4; H302 Eye Irrit. 2; H319 Skin Irrit. 2; H315	>= 15 - <= 25
	231-753-5		
	01-2119513203-57-XXXX	Acute toxicity estimate Acute oral toxicity: 500 mg/kg	
Sulfuric acid, iron(3+) salt (3:2), hydrate	15244-10-7 233-072-9	Acute Tox. 4; H302 Eye Irrit. 2; H319 STOT SE 3; H335	>= 3 - <= 4
diammonium hydrogen 2-hydroxypropane-1,2,3-tricarboxylate	3012-65-5 221-146-3	Skin Corr., Eye Dam. 2, 1; H315, H318	>= 1 - <= 5

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Symptoms of poisoning may appear several hours later. Keep under medical supervision for at least 48 hours. Remove from exposure, lie down. Take off immediately all contaminated clothing.
- If inhaled : Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. Obtain medical attention.
- In case of skin contact : Wash off immediately with soap and plenty of water. Flush with plenty of water. If skin irritation persists, call a physician.
- In case of eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- If swallowed : Clean mouth with water and drink afterwards plenty of water. If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

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4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : The product is not flammable.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : No information available.

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Keep people away from and upwind of spill/leak.
In case of involuntary exposition of the product contact producer or supplier.

6.2 Environmental precautions

Environmental precautions : Product should not reach open waters.
Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Sweep up or vacuum up spillage and collect in suitable container for disposal.

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Dispose contaminated material waste according to chapter 13.
Clean thoroughly.
Suitable cleaning agents
Water

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes.

Advice on protection against fire and explosion : No special precautions required.

Hygiene measures : Keep away from food, drink and animal feedingstuffs. Wash hands before breaks and at the end of workday. Avoid contact with the skin and the eyes.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed. Keep away from heat. Keep away from direct sunlight. Keep locked up. Keep out of the reach of children.

Storage class (TRGS 510) : 12, Non Combustible Liquids

7.3 Specific end use(s)

Specific use(s) : Not relevant

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
iron sulphate	7720-78-7	TWA	1 mg/m ³ (Iron)	GB EH40
Sulfuric acid, iron(3+) salt (3:2), hydrate	15244-10-7	TWA	1 mg/m ³ (Iron)	GB EH40

The product does not contain any relevant quantities of materials with workplace related values that require supervising.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

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Substance name	End Use	Exposure routes	Potential health effects	Value
iron sulphate	Workers	Skin contact	Acute effects, systemic effects	2,8 mg/kg
Remarks:	Exposure time: 24 h			
	Workers	Inhalation	Acute effects, systemic effects	9,9 mg/m3
	Workers	Skin contact	Chronic effects, systemic effects	2,8 mg/kg
Remarks:	Exposure time: 24 h			
	Workers	Inhalation	Chronic effects, systemic effects	9,9 mg/m3
	Consumers	Ingestion	Acute effects, systemic effects	1,4 mg/kg
Remarks:	Exposure time: 24 h			
	Consumers	Skin contact	Acute effects, systemic effects	1,4 mg/kg
Remarks:	Exposure time: 24 h			
	Consumers	Inhalation	Acute effects, systemic effects	2,5 mg/m3
	Consumers	Ingestion	systemic effects, Chronic effects	1,4 mg/kg
Remarks:	Exposure time: 24 h			
	Consumers	Skin contact	Chronic effects, systemic effects	1,4 mg/kg
Remarks:	Exposure time: 24 h			
	Consumers	Inhalation	Chronic effects, systemic effects	2,5 mg/m3

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
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iron sulphate	Water	
Remarks:	This product has no known ecotoxicological effects.	
	Behaviour in waste water treatment plants	2483 mg/l
	Fresh water sediment	246000 mg/kg
	Marine sediment	246000 mg/kg
	Soil	276000 mg/kg

8.2 Exposure controls

Personal protective equipment

Eye protection : Tightly fitting safety goggles

Hand protection

Remarks : Solvent-resistant gloves Observe skin protection measures like preventiveskin protection, soil-related careful cleaning and application of creamy skin-care agents. The selection of suitable depends upon the material, and also upon the quality of the gloves. The degree of protection will vary from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Skin and body protection : Protective suit

Respiratory protection : Respiratory protection not required.

Protective measures : Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

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General advice	: Product should not reach open waters. Do not let product enter drains.
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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: liquid
Colour	: light brown
Odour	: odourless
pH	: 2,1, (20 °C)
Melting point/range	: < 0 °C
Boiling point/boiling range	: > 100 °C
Flash point	: Not applicable
Evaporation rate	: No data available
Flammability (solid, gas)	: The product is not flammable.
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 1,38 g/cm ³ (20 °C)
Solubility(ies)	
Water solubility	: completely miscible
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No decomposition if stored and applied as directed.
Viscosity	
Viscosity, dynamic	: No data available

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Viscosity, kinematic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: Not considered an oxidizing substance

9.2 Other information

Surface tension	: No data available
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SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions	: Corrosive in contact with metals
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10.4 Conditions to avoid

Conditions to avoid	: No decomposition if stored and applied as directed.
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10.5 Incompatible materials

Materials to avoid	: None known.
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10.6 Hazardous decomposition products

Hazardous decomposition products	: In case of fire hazardous decomposition products may be produced such as: Sulphur oxides
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SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product:

Acute oral toxicity	: Remarks: This information is not available.
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Components:

iron sulphate:

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Acute oral toxicity	: LD50 (Rat): > 2.000 mg/kg Method: OECD Test Guideline 401
	LD50 (Rat): 657 - 4.390 mg/kg Method: Calculation method
	Acute toxicity estimate: 500 mg/kg Method: Converted acute toxicity point estimate
Acute inhalation toxicity	: Remarks: This information is not available.
Acute dermal toxicity	: LD50 (Rat): > 1.992 mg/kg Method: Converted acute toxicity point estimate

Skin corrosion/irritation

Product:

Remarks: Irritating to skin and mucous membranes

Components:

iron sulphate:

Method: OECD Test Guideline 404

Result: Skin irritation

Remarks: Irritating to skin and mucous membranes

Serious eye damage/eye irritation

Product:

Remarks: Contact with eyes may cause irritation.

Components:

iron sulphate:

Method: OECD Test Guideline 405

Result: Eye irritation

Respiratory or skin sensitisation

Product:

Remarks: None known.

Components:

iron sulphate:

Method: OECD TG 429

Result: Did not cause sensitisation on laboratory animals.

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Carcinogenicity

Components:

iron sulphate:

Carcinogenicity - Assessment : Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments.

STOT - repeated exposure

Components:

iron sulphate:

Remarks: No known effect.

Repeated dose toxicity

Components:

iron sulphate:

Species: Rat

NOAEL: 284 - 324 mg/kg

Application Route: Oral

Exposure time: 90 d

Remarks: Information given is based on data obtained from similar substances.

Species: Rat

NOAEL: 100 mg/kg

Application Route: Oral

Exposure time: 49 d

Application Route: by inhalation

Remarks: This information is not available.

Application Route: Dermal

Remarks: This information is not available.

Aspiration hazard

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

11.2 Information on other hazards

Endocrine disrupting properties

No data available

Further information

Product:

Remarks: Harmful

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SECTION 12: Ecological information

12.1 Toxicity

Components:

iron sulphate:

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Components:

iron sulphate:

Biodegradability : Remarks: The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

iron sulphate:

Bioaccumulation : Remarks: Accumulation in aquatic organisms is unlikely.

12.4 Mobility in soil

Product:

Distribution among environmental compartments : Remarks: No data available

Components:

iron sulphate:

Distribution among environmental compartments : Medium: Soil
Remarks: immobile

12.5 Results of PBT and vPvB assessment

Product:

Assessment : Remarks: No data available

Components:

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iron sulphate:

Assessment

: This substance is not considered to be very persistent and very bioaccumulating (vPvB).. This substance is not considered to be persistent, bioaccumulating and toxic (PBT)..

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

Product:

Environmental fate and pathways

: No data available

Additional ecological information

: Undiluted product or large quantities of it may not arrive in the groundwater, surface waters, or drains.
See information supplied by the manufacturer.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

: Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Fertilizer

Check if agriculture use is possible.

Contaminated packaging

: Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

Observe national and local legal requirements.

SECTION 14: Transport information

14.1 UN number or ID number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

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14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not relevant

SECTION 15: Regulatory information

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

Water contaminating class : WGK 1 slightly water endangering
(Germany)

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Full text of H-Statements

H302 : Harmful if swallowed.
H315 : Causes skin irritation.
H318 : Causes serious eye damage.
H319 : Causes serious eye irritation.
H335 : May cause respiratory irritation.

Full text of other abbreviations

Acute Tox. : Acute toxicity
Eye Dam. : Serious eye damage
Eye Irrit. : Eye irritation
Skin Corr. : Skin corrosion
Skin Irrit. : Skin irritation
STOT SE : Specific target organ toxicity - single exposure

(Q)SAR - (Quantitative) Structure Activity Relationship; ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; DIN - Standard of the German Institute for Standardisation; ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the

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Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; 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; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TRGS - Technical Rule for Hazardous Substances; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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