

Basfoliar® MnZn Premium SL

Version: 1.1
Date of last issue: 10.01.2024
Date of first issue: 10.01.2024

Revision Date:
09.02.2024

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

1.1 Product identifier

Trade name : Basfoliar® MnZn Premium SL
UFI : 4QV5-70K5-M00D-GPDX

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

Use of the Substance/Mixture : Fertiliser

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 responsible for the SDS : info@compo-expert.com

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, Category 1 H314: Causes severe skin burns and eye damage.

Specific target organ toxicity - repeated exposure, Category 2 H373: May cause damage to organs through prolonged or repeated exposure.

Long-term (chronic) aquatic hazard, Category 3 H412: Harmful to aquatic life with long lasting effects.

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Basfoliar® MnZn Premium SL





Version: 1.1
Date of last issue: 10.01.2024
Date of first issue: 10.01.2024

Revision Date:
09.02.2024

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	:	 
Signal word	:	Danger
Hazard statements	:	H314 Causes severe skin burns and eye damage. H373 May cause damage to organs through prolonged or repeated exposure. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	:	Prevention: P280 Wear protective gloves/ eye protection/ face protection. Response: P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. 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/ doctor. Storage: P405 Store locked up. Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

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.	Classification	Concentration
---------------	---------	----------------	---------------

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Basfoliar® MnZn Premium SL



Version: 1.1
Date of last issue: 10.01.2024
Date of first issue: 10.01.2024

Revision Date:
09.02.2024

	EC-No. Registration number		(% w/w)
Mangan(II)sulfat-monohydrat	7785-87-7		>= 10 - < 25
Zinc nitrate	7779-88-6 231-943-8	Ox. Sol. 2; H272 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 3 - < 20
citric acid	77-92-9 201-069-1 01-2119461715-35-XXXX	Eye Irrit. 2; H319 STOT SE 3; H335	>= 1 - < 10

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- If inhaled : If breathed in, move person into fresh air.
- In case of skin contact : Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.
- In case of eye contact : Immediately flush eye(s) with plenty of water. Seek medical advice.
- If swallowed : Rinse mouth with water. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Basfoliar® MnZn Premium SL



Version: 1.1
Date of last issue: 10.01.2024
Date of first issue: 10.01.2024

Revision Date:
09.02.2024

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : In case of fire, use water/water spray/water jet/carbon dioxide/sand/foam/alcohol resistant foam/chemical powder for extinction.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : Not relevant

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : In case of combustion evolution of dangerous gases possible.
nitrogen oxides
ammonia

5.3 Advice for firefighters

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

Further information : The product is not flammable.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid contact with skin, eyes and clothing.

6.2 Environmental precautions

Environmental precautions : Do not let product enter drains, surface water or subsoil water.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Allow to solidify, use mechanical handling equipment.
Shovel into suitable container for disposal.

6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Do not eat, drink or smoke when using this product.
Wash hands before breaks and at the end of workday.

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Basfoliar® MnZn Premium SL



Version: 1.1

Date of last issue: 10.01.2024

Date of first issue: 10.01.2024

Revision Date:

09.02.2024

Hygiene measures : Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Protect from atmospheric humidity. Keep away from direct sunlight. Keep in a cool, well ventilated place away from reducing agents.

Advice on common storage : Segregate from reducing agents. Keep away from food, drink and animal feedingstuffs.

Storage class (TRGS 510) : 8B, Non-combustible, corrosive hazardous materials

Recommended storage temperature : 20 - 25 °C

Other data : Protect against falling below the following temperature: -5°C

7.3 Specific end use(s)

Specific use(s) : Always read the label and product information before use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits of decomposition products

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Ammonia	7664-41-7, 7664-41-7	TWA	20 ppm 14 mg/m ³	2000/39/EC
Further information	Indicative			
		STEL	50 ppm 36 mg/m ³	2000/39/EC
Further information	Indicative			
			20 ppm 14 mg/m ³	DE TRGS 900
Peak-limit: excursion factor (category)	2;(I)			
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission), European Union (The EU has established a limit value: deviations in value and peak limit are possible), When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			

8.2 Exposure controls

Engineering measures

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Basfoliar® MnZn Premium SL



Version: 1.1
Date of last issue: 10.01.2024
Date of first issue: 10.01.2024

Revision Date:
09.02.2024

Ensure thorough ventilation of stores and work areas.

Personal protective equipment

Eye protection : Safety glasses

Hand protection

Remarks : Protective gloves

Skin and body protection : Wearing of closed work clothing is recommended.

Respiratory protection : No personal respiratory protective equipment normally required.

Breathing apparatus only if aerosol or dust is formed.

Environmental exposure controls

General advice : Do not let product enter drains, surface water or subsoil water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : liquid

Colour : pink

Odour : No information available.

Odour Threshold : No data available

pH : 0,8, (20 °C)

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : No data available

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Basfoliar® MnZn Premium SL



Version: 1.1
Date of last issue: 10.01.2024
Date of first issue: 10.01.2024

Revision Date:
09.02.2024

Evaporation rate	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 1,3 g/cm ³
Solubility(ies)	
Water solubility	: soluble
Partition coefficient: n-octanol/water	: Not applicable
Auto-ignition temperature	: No data available
Decomposition temperature	: No decomposition if stored and applied as directed.
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2 Other information

Surface tension : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.
No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under normal conditions.
No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006



Basfoliar® MnZn Premium SL

Version: 1.1
Date of last issue: 10.01.2024
Date of first issue: 10.01.2024

Revision Date:
09.02.2024

Hazardous reactions : Reacts with reducing agents.

10.4 Conditions to avoid

Conditions to avoid : No dangerous reaction known under conditions of normal use.

10.5 Incompatible materials

Materials to avoid : Strong reducing agents

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed., No hazardous decomposition products are known.

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

Acute inhalation toxicity : Remarks: Based on available data, the classification criteria are not met.

Acute dermal toxicity : Remarks: Based on available data, the classification criteria are not met.

Components:

Zinc nitrate:

Acute oral toxicity : LD50 Oral (Rat): 1.190 mg/kg

citric acid:

Acute oral toxicity : LD50 Oral (Rat): 3.000 mg/kg

Skin corrosion/irritation

Product:

Result: Causes severe skin burns and eye damage.

Components:

Zinc nitrate:

Species: Rabbit

Result: Skin irritation

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Basfoliar® MnZn Premium SL



Version: 1.1
Date of last issue: 10.01.2024
Date of first issue: 10.01.2024

Revision Date:
09.02.2024

Serious eye damage/eye irritation

Product:

Result: Causes serious eye damage.

Components:

Zinc nitrate:

Result: Eye irritation

Respiratory or skin sensitisation

Product:

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

Components:

Zinc nitrate:

Result: non-sensitizing

germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: Based on available data, the classification criteria are not met.

Components:

Zinc nitrate:

Genotoxicity in vitro : Remarks: No data available

Carcinogenicity

Product:

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

Components:

Zinc nitrate:

Remarks: Did not show carcinogenic effects in animal experiments.

Reproductive toxicity

Product:

Effects on fertility :
Remarks: Based on available data, the classification criteria are not met.

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006



Basfoliar® MnZn Premium SL

Version: 1.1
Date of last issue: 10.01.2024
Date of first issue: 10.01.2024

Revision Date:
09.02.2024

Effects on foetal development : Remarks: Based on available data, the classification criteria are not met.

Components:

Zinc nitrate:

Effects on fertility : Remarks: No toxicity to reproduction

Effects on foetal development : Remarks: Did not show teratogenic effects in animal experiments.

STOT - single exposure

Product:

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Product:

Assessment: May cause damage to organs through prolonged or repeated exposure.

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

No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : Remarks: No data available

Components:

Zinc nitrate:

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other : Remarks: No data available

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Basfoliar® MnZn Premium SL



Version: 1.1
Date of last issue: 10.01.2024
Date of first issue: 10.01.2024

Revision Date:
09.02.2024

aquatic invertebrates

citric acid:

Toxicity to fish : LC50 (golden orfe): 440 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.535 mg/l
Exposure time: 24 h

Toxicity to algae : (Scenedesmus quadricauda (Green algae)): 640 mg/l
Exposure time: 7 DAY

Toxicity to bacteria : EC0 (Pseudomonas putida): 10.000 mg/l
Exposure time: 16 h

12.2 Persistence and degradability

Product:

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

Components:

Zinc nitrate:

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

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Does not bioaccumulate.

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

Distribution among environmental compartments : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : Remarks: Not applicable

Components:

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006



Basfoliar® MnZn Premium SL

Version: 1.1
Date of last issue: 10.01.2024
Date of first issue: 10.01.2024

Revision Date:
09.02.2024

Zinc nitrate:
Assessment : Remarks: Not applicable

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

Product:

Additional ecological information : May contribute to eutrophication in static waters, therefore should not be released into surface waters.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Disposal together with normal waste is not allowed. Special disposal required according to local regulations.
Do not flush into surface water or sanitary sewer system.

Contaminated packaging : Packaging that is not properly emptied must be disposed of as the unused product.
Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.
If recycling is not practicable, dispose of in compliance with local regulations.

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

Segregation group : : (-)

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Basfoliar® MnZn Premium SL



Version: 1.1
Date of last issue: 10.01.2024
Date of first issue: 10.01.2024

Revision Date:
09.02.2024

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Not listed

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

Water hazard class (Germany) : WGK 3 highly hazardous to water

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Full text of H-Statements

H272 : May intensify fire; oxidizer.
H302 : Harmful if swallowed.
H315 : Causes skin irritation.
H319 : Causes serious eye irritation.
H335 : May cause respiratory irritation.
H400 : Very toxic to aquatic life.
H410 : Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity
Aquatic Acute : Short-term (acute) aquatic hazard
Aquatic Chronic : Long-term (chronic) aquatic hazard
Eye Irrit. : Eye irritation
Ox. Sol. : Oxidizing solids
Skin Irrit. : Skin irritation
STOT SE : Specific target organ toxicity - single exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Basfoliar® MnZn Premium SL



Version: 1.1
Date of last issue: 10.01.2024
Date of first issue: 10.01.2024

Revision Date:
09.02.2024

Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECl - Korea Existing Chemicals Inventory; 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; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; 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; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

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.

DE / EN