

Basfoliar Combi-Stipp SL

Version: 2.2

Revision Date:
07.02.2017

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

1.1 Product identifier

Trade name : Basfoliar Combi-Stipp SL

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

Use of the Sub-
stance/Mixture : Fertilizer

1.3 Details of the supplier of the safety data sheet

Company : COMPO EXPERT GmbH
Kroegerweg 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

Quality / Safety / Environment
Telephone:+49 (0) 2151 - 579 - 0

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4 H302: Harmful if swallowed.

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

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H302 Harmful if swallowed.
H318 Causes serious eye damage.

Precautionary statements : **Prevention:**

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P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:	
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
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.
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. EC-No. Registration number	Classification	Concentration (% w/w)
nitric acid, ammonium calcium salt	15245-12-2 239-289-5 01-2119493947-16-XXXX	Acute Tox. 4; H302 Eye Dam. 1; H318	>= 50 - <= 60
Magnesium chloride (MgCl ₂), hexahydrate	7791-18-6 232-094-6 01-2119485597-19-XXXX		>= 1 - <= 10
Boric acid	11113-50-1 234-343-4 01-2119486683-25-XXXX	Repr. 1B; H360FD	<= 0,2
Borates, tetra sodium salts, pentahydrate	12179-04-3 215-540-4 01-2119490790-32-XXXX	Repr. 1B; H360FD Eye Irrit. 2; H319	<= 0,2

For explanation of abbreviations see section 16.

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SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Move out of dangerous area.
- If inhaled : Move to fresh air.
If symptoms persist, call a physician.
- In case of skin contact : Wash off immediately with soap and plenty of water.
- In case of eye contact : Rinse thoroughly with plenty of water for at least 15 minutes
and consult a physician.
If eye irritation persists, consult a specialist.
- If swallowed : Rinse mouth.
Do NOT induce vomiting.
Obtain medical attention.

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 fire-fighting : Heating or fire can release toxic gas.

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
In the event of fire and/or explosion do not breathe fumes.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

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6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Ensure adequate ventilation.
In case of involuntary exposition of the product contact producer or supplier.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.

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).

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 : Keep away from heat.
Keep away from direct sunlight.

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

Hygiene measures : Keep away from food, drink and animal feedingstuffs. Take off immediately all contaminated 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 : Keep away from heat. Keep away from direct sunlight.

Further information on storage conditions : Keep containers tightly closed in a cool, well-ventilated place.

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

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

Recommended storage temperature : 0 - 30 °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

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8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Boric acid		TWA	2,6 mg/m ³	DE TRGS 900
		STEL	5,2 mg/m ³	DE TRGS 900
			0,5 mg/m ³	
Borates, tetra sodium salts, pentahydrate			3 mg/m ³	DE TRGS 900
Peak-limit: excursion factor (category)	8;(II)			
Further information	Commission for dangerous substances, The threshold value is based on the element content of the corresponding metal., When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		AGW	0,5 mg/m ³ (Borate)	DE TRGS 900
Peak-limit: excursion factor (category)	2;(I)			
Further information	Commission for dangerous substances, The threshold value is based on the element content of the corresponding metal., When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
			1 mg/m ³	ACGIHTLV

Contains no substances with occupational exposure limit values.

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

Substance name	End Use	Exposure routes	Potential health effects	Value
nitric acid, ammonium calcium salt	Workers	Inhalation	Specific effects	24,5 mg/m ³
Remarks:	Exposure time: 1 DAY			
	Workers	Skin contact	Specific effects	13,9 mg/kg
Remarks:	Exposure time: 1 DAY			
	Consumers	Inhalation	systemic effects	6,3 mg/m ³
	Consumers	Skin contact	systemic effects	8,33 mg/kg
	Consumers	Ingestion	systemic effects	8,33 mg/kg
Remarks:	Exposure time: 1 DAY			
Boric acid	Workers	Inhalation	Long-term exposure,	8,28 mg/m ³

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			Systemic effects	
	Workers	Skin contact	Long-term exposure, Systemic effects	392 mg/kg
	Consumers	Ingestion	Short-term exposure, Systemic effects	0,98 mg/kg
	Consumers	Ingestion	Long-term exposure, Systemic effects	0,98 mg/kg
	Consumers	Inhalation	Long-term exposure, Systemic effects	4,15 mg/m ³
	Consumers	Skin contact	Long-term exposure, Systemic effects	196 mg/kg

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

Substance name	Environmental Compartment	Value
nitric acid, ammonium calcium salt	Fresh water	0,45 mg/l
	Marine water	0,045 mg/l
	Ceiling Limit Value	4,5 mg/l

8.2 Exposure controls

Personal protective equipment

Eye protection : Safety glasses

Hand protection

Material : Polyvinyl alcohol or nitrile- butyl-rubber gloves

Glove length :
Chloroprene

Remarks : For prolonged or repeated contact use protective gloves.

Skin and body protection : Protective suit

Respiratory protection : Breathing apparatus only if aerosol or dust is formed.

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

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

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Colour	: cream
Odour	: characteristic
pH	: ca. 3,0, (20 °C)
melting range	: ca. 0 °C
Boiling range	: ca. 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	: ca. 1,5 g/cm ³ (20 °C)
Solubility(ies)	
Water solubility	: soluble
Partition coefficient: n-octanol/water	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: To avoid thermal decomposition, do not overheat.
Viscosity	
Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: Not applicable
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

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Reducing agents

10.4 Conditions to avoid

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

10.5 Incompatible materials

Materials to avoid : Strong reducing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : In case of fire hazardous decomposition products may be produced such as:
Nitrogen oxides (NO_x)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat): 3.900 mg/kg
Remarks: information on:

Components:

nitric acid, ammonium calcium salt:

Acute oral toxicity : LD50: > 300 mg/kg

Acute inhalation toxicity : Remarks: Not relevant because of low vapour pressure.

Remarks: Not relevant because of low dust formation.

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg
Method: OECD Guideline 402

Boric acid:

Acute oral toxicity : LD50 (Mouse): 3.450 mg/kg

LD50 (Rat): 2.660 mg/kg

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Acute inhalation toxicity : LC50 (Rat): 2 mg/l
Acute dermal toxicity : LD50 Dermal (Rabbit): > 2.000 mg/kg

Borates, tetra sodium salts, pentahydrate:

Acute oral toxicity : LD50 (Rat): 3.200 - 3.400 mg/kg
Acute inhalation toxicity : LC50 (Rat): > 2,0 mg/l
Method: OECD Test Guideline 403
Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg

Skin corrosion/irritation

Product:

Result: Mild skin irritation

Components:

nitric acid, ammonium calcium salt:

Species: Rabbit
Result: No skin irritation

Boric acid:

Species: Rabbit
Result: No skin irritation

Borates, tetra sodium salts, pentahydrate:

Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation

Product:

Remarks: Irritating to eyes.

Components:

nitric acid, ammonium calcium salt:

Species: Rabbit
Result: Irritating to eyes.

Boric acid:

Species: Rabbit
Method: OECD Test Guideline 405
Result: No eye irritation

Borates, tetra sodium salts, pentahydrate:

Species: Rabbit
Assessment: Irritant
Result: Moderate eye irritation

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Respiratory or skin sensitisation

Product:

Remarks: None known.

Components:

Boric acid:

Method: OECD Test Guideline 406
Result: non-sensitizing

Borates, tetra sodium salts, pentahydrate:

Test Type: Buehler Test
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: Contains no hazardous ingredients according to GHS

Components:

Boric acid:

Genotoxicity in vitro : Test Type: Mammalian cell gene mutation assay
Result: Mutagenicity tests revealed no genotoxic potential.
Remarks: In vitro tests did not show mutagenic effects

Germ cell mutagenicity- Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Borates, tetra sodium salts, pentahydrate:

Germ cell mutagenicity- Assessment : In vitro tests showed mutagenic effects

Carcinogenicity

Product:

Remarks: Contains no ingredient listed as a carcinogen

Components:

Boric acid:

Species: Rat
Application Route: Oral
Method: OECD Test Guideline 451
Remarks: Animal testing did not show any carcinogenic effects.

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Borates, tetra sodium salts, pentahydrate:

Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.

Reproductive toxicity

Product:

Effects on fertility :
Remarks: No toxicity to reproduction

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

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

Components:

Boric acid:

Effects on foetal development : Remarks: Animal ingestion studies in several species, at high doses, indicate that borates cause reproductive and developmental effects.

Reproductive toxicity - Assessment : May damage fertility. May damage the unborn child.

Borates, tetra sodium salts, pentahydrate:

Reproductive toxicity - Assessment : In animal testing, risk of impaired fertility was shown only after administration of very high doses of this substance.
May damage fertility. May damage the unborn child.

STOT - single exposure

Product:

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

STOT - repeated exposure

Product:

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

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : LC50 (various species): > 500 mg/l

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Remarks: information on:

Components:

nitric acid, ammonium calcium salt:

- Toxicity to fish : LC50 (Guppy): 1.378 mg/l
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): 490 mg/l
- Toxicity to algae : LC50 (other aquatic plant): > 1.700 mg/l

Borates, tetra sodium salts, pentahydrate:

- Toxicity to fish : LC50 (dab): 74 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 242 mg/l
Exposure time: 24 h
- Toxicity to algae : EC10 (Scenedesmus subspicatus): 24 mg/l
Exposure time: 96 h

12.2 Persistence and degradability

Product:

- Biodegradability : Remarks: The product works in the soil as fertilizer and is diminished in a few weeks.

Components:

nitric acid, ammonium calcium salt:

- Biodegradability : Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

Boric acid:

- Biodegradability : Remarks: Not applicable

12.3 Bioaccumulative potential

Product:

- Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Components:

nitric acid, ammonium calcium salt:

- Bioaccumulation : Remarks: Bioaccumulation is unlikely.

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12.4 Mobility in soil

Product:

Mobility : Remarks: Over time, the substance will preferentially distribute into the compartment soil.

Components:

Boric acid:

Mobility : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : Remarks: Not applicable

Components:

Boric acid:

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).
Remarks: Not applicable

12.6 Other adverse effects

Product:

Additional ecological information : slightly water endangering
See information supplied by the manufacturer.
Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Do not dispose of with domestic refuse.
Do not flush into surface water or sanitary sewer system.
Fertilizer
Check if agriculture use is possible.

Contaminated packaging : Dispose of as unused product.
If recycling is not practicable, dispose of in compliance with local regulations.
Suitable cleaning agents
Water
Cleaning agent

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

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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

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

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.
H318 : Causes serious eye damage.
H319 : Causes serious eye irritation.
H360FD : May damage fertility. May damage the unborn child.

Full text of other abbreviations

Acute Tox. : Acute toxicity
Eye Dam. : Serious eye damage
Eye Irrit. : Eye irritation
Repr. : Reproductive toxicity

(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 Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentra-

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tion; 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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