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

1.1 Product identifier

Trade name : Super Floranid® Twin Gazon BS 20-5-10

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 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)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard statements	:		Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
Supplemental Hazard Statements	: 1	EUH210	Safety data sheet available on request.
Further information	:		ardous Substances" legislation (rordnung) appendix I, No. 5 (Ammonium C III)



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2.3 Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature

: NPK-Fertilizer on basis: N,N"-(isobutylidene)diurea, crotonylidenediurea, ammonium nitrate, potassium salt, ammonium salts, phosphates, magnesium salts, calcium salts, other nutrients. Bacillus subtilis

Hazardous components

Chemical Name	CAS-No. Classification EC-No. Registration number		Concentration (% w/w)
ammonium nitrate	6484-52-2 229-347-8 01-2119490981-27- XXXX	Ox. Sol. 3; H272 Eye Irrit. 2; H319	>= 10 - < 45
zinc sulphate	7733-02-0 231-793-3 01-2119474684-27- XXXX	Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	< 0,3

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	: Wash hands with water as a precaution.
If inhaled	 Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. Obtain medical attention. In case of lung irritation, first treatment with dexametason aerosol (spray).



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In case of skin contact	: Wash off with plenty of water.
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. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	 Ingestion may provoke the following symptoms: Methaemoglobinemia Inhalation of decomposition products in high concentration may cause shortness of breath (lung oedema).
	may cause shortness of breath (long occorna).

4.3 Indication of any immediate medical attention and special treatment needed

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Treatment	:	Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: Water
Unsuitable extinguishing media	: Foam Dry chemical Carbon dioxide (CO2) Sand

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting	 Can decompose at above 100 °C. Thermal decomposition products: Nitrogen monoxide, nitrogen dioxide, dinitrogenoxide, ammonia Isobutyraldehyd
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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



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Personal precautions

none

: Keep away from children. 6.2 Environmental precautions Environmental precautions : Do not flush into surface water or sanitary sewer system. Retain and dispose of contaminated wash water. 6.3 Methods and material for containment and cleaning up Methods for cleaning up : Use mechanical handling equipment. 6.4 Reference to other sections **SECTION 7: Handling and storage** 7.1 Precautions for safe handling Advice on safe handling Protect from contamination. Keep away from direct sunlight. Protect against heat. Protect from moisture. Advice on protection against : The product is not flammable. Keep away from sources of ignition - No smoking. Keep away from combustible materials.

other ignition sources. No smoking. Risk of explosion if heated under confinement.

Keep away from heat, hot surfaces, sparks, open flames and

Hygiene measures : Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage : When stored loose do not mix with other fertilizers. Store well areas and containers away from other substances. Keep away from direct sunlight. Protect against heat. Protect from contamination. Protect from moisture. Storage class (TRGS 510) : 5.1C, Ammonium nitrate and ammonium nitrate containing preparations : Keep in a dry place. Dampness

7.3 Specific end use(s)

fire and explosion

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.



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

Substance name	End Use	Exposure routes	Potential health effects	Value
ammonium nitrate	Workers	Inhalation	Long-term systemic effects	36 mg/m3
	Workers	Skin contact	Long-term systemic effects	5,12 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	2,56 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	8,9 mg/m3
	Consumers	Skin contact, Ingestion	Long-term systemic effects	2,56 mg/kg bw/day

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

Substance name	Environmental Compartment	Value
ammonium nitrate	Sewage treatment plant	18 mg/l

8.2 Exposure controls

Personal protective equipment

Eye protection : In case of dust formation:

Tightly fitting safety goggles

Hand protection Material	: Gloves
Skin and body protection	: No special protective equipment required.
Respiratory protection	: respiratory protection only if aerosol or dust is formed.

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General advice

: Do not flush into surface water or sanitary sewer system. Retain and dispose of contaminated wash water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: granular
Colour	: various
Odour	: odourless
Odour Threshold	: No data available
рН	: ca. 6,2, Concentration: 100 g/l (20 °C)
Melting point/range	: No data available
Boiling point/boiling range	: Not applicable
Flash point	: Not relevant
Evaporation rate	: Not applicable
Flammability (solid, gas)	: The product is not flammable.
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapour pressure	: Not applicable
Relative vapour density	: Not applicable
Bulk density	: ca. 860 kg/m ³
Solubility(ies) Water solubility	: soluble
Partition coefficient: n- octanol/water	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: > 130 °C To avoid thermal decomposition, do not overheat.
Viscosity	

Viscosity



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Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: Not applicable
Explosive properties	: Not explosive
Oxidizing properties	: Not applicable

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

No decomposition if stored and applied as directed. Decomposes on heating.

10.3 Possibility of hazardous reac	tio	ns
Hazardous reactions	:	Evolution of ammonia under influence of alkalies.

Conditions to avoid	:	Keep away from heat and sources of ignition.
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10.5 Incompatible materials

Materials to avoid	: oxidizable substances
	Strong acids and strong bases

10.6 Hazardous decomposition products

Hazardous decomposition	: Nitrogen monoxide, nitrogen dioxide, dinitrogenoxide,
products	ammonia
	Isobutyraldehyd

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: No data available
		Health injuries are not known or expected under normal use.



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Acute dermal toxicity	: Remarks: No data available Health injuries are not known or expected under normal use.
Components: ammonium nitrate: Acute oral toxicity	: LD50 (Rat): > 2.950 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	: > 88,8 mg/l Method: No information available.
Acute dermal toxicity	: LD50 (Rat): > 5.000 mg/kg Method: OECD Test Guideline 402
zinc sulphate: Acute oral toxicity	: LD50 (Rat): 862 - 4.429 mg/kg
Acute dermal toxicity	: LD50 Dermal (Rat): > 2.000 mg/kg

Skin corrosion/irritation

Product:

Result: non-irritant Remarks: The product has not been tested. The information is derived from the properties of the individual components.

Components:

ammonium nitrate: Species: Rabbit Method: OECD Test Guideline 404 Result: non-irritant

zinc sulphate:

Species: Rabbit Assessment: Irritating to skin.

Serious eye damage/eye irritation

Product:

Species: Rabbit Method: OECD Test Guideline 405 Result: non-irritant Remarks: The product was not tested. The statement was derived from products of similar structure and composition.

Components:

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according to Regulation (EC) No. 1907/2006

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ammonium nitrate:

Species: Rabbit Method: OECD Test Guideline 405 Result: Irritant

zinc sulphate:

Species: Rabbit Result: Risk of serious damage to eyes.

Respiratory or skin sensitisation

Product:

Result: non-sensitizing Remarks: The product has not been tested. The information is derived from the properties of the individual components.

Components:

ammonium nitrate: Result: Does not cause skin sensitisation.

germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available

Components:

ammonium nitrate: Genotoxicity in vitro : Method: OECD Test Guideline 471 Result: negative

Carcinogenicity

Product:

Remarks: Contains no ingredient listed as a carcinogen

Components:

ammonium nitrate: Species: Rat Remarks: Animal testing did not show any carcinogenic effects.

Reproductive toxicity

Product:

Effects on fertility

Remarks: No toxicity to reproduction

according to Regulation (EC) No. 1907/2006

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The product has not been tested. The information is derived from the properties of the individual components.

Components:

ammonium nitrate: Effects on fertility	Species: Rat
	Remarks: Animal testing did not show any effects on fertility.
Effects on foetal development	Species: Rat 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.

Remarks: The product has not been tested. The information is derived from the properties of the individual components.

STOT - repeated exposure

Product:

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure. Remarks: The product has not been tested. The information is derived from the properties of the individual components.

Repeated dose toxicity

Components:

ammonium nitrate: Species: Rat NOAEL: > 1.500 mg/kg Application Route: Oral Exposure time: 28 d

Species: Rat NOAEL: = 256 mg/kg Application Route: Oral Exposure time: 52 w Method: OECD Test Guideline 453

Species: Rat NOAEL: >= 185 mg/kg Application Route: by inhalation Exposure time: 2 w according to Regulation (EC) No. 1907/2006

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Method: Repeated Dose Inhalation Toxicity: 28-day or 14-day Study.

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: Danger of methaemoglobin formation. The product was not tested. The statement was derived from products of similar structure and composition.

SECTION 12: Ecological information

12.1 Toxicity

Product:		
Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Method: Directive 84/449/EEC, C.2
Toxicity to algae	:	EC50 (Scenedesmus subspicatus): > 100 mg/l Exposure time: 72 h Method: DIN 38412
Components:		
ammonium nitrate:		
Toxicity to fish	:	LC50 (Fish): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia (water flea)): 490 mg/l Exposure time: 48 h
		LC50 : 490 mg/l
Toxicity to algae	:	EC50 (Selenastrum capricornutum (green algae)): 1.700 mg/l Exposure time: 10 d



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zinc sulphate:		
Toxicity to fish	C50 (Oncorhy Exposure time	/nchus mykiss (rainbow trout)): 0,43 mg/l : 96 h
Toxicity to daphnia and other aquatic invertebrates	EC50 (Daphnia Exposure time:	a magna (Water flea)): 1,86 mg/l : 48 h
Toxicity to algae	EC50 (Scened Exposure time:	esmus quadricauda (Green algae)): 0,52 mg/l : 120 h
Toxicity to bacteria	EC50 (Bacteria): 22,75 mg/l Exposure time: 0,5 h	
12.2 Persistence and degradabili		
Product:		
Biodegradability	Remarks: No c	lata available
Physico-chemical	OOC reduction	
removability	a. 85 %	0 301E/92/69/EWG, C.4-B
		dily eliminated from water
<u>Components:</u> ammonium nitrate:		
Biodegradability	Remarks: The	methods for determining the biological
2.0009.0000		re not applicable to inorganic substances.
12.3 Bioaccumulative potential		
Product:		
Bioaccumulation	Remarks: Bioa	ccumulation is unlikely.
Components:		
ammonium nitrate: Bioaccumulation	Remarks: Bioa	ccumulation is unlikely.
Partition coefficient: n- octanol/water	og Pow: -3,1	
12.4 Mobility in soil		
Product:		
Mobility	Remarks: No c	lata available
Distribution among	Remarks: Mod	erately mobile in soils
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environmental compartments

12.5 Results of PBT and vPvB assessment

Product:

Assessment

: Remarks: Not applicable

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

Product:

Teddett	
Additional ecological information	 Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations. There is a high probability that the product is acute not harmful to aquatic organisms.

SECTION 13: Disposal considerations

13.1 Waste treatment methods	
Product	: Check if agriculture use is possible. Contact manufacturer.
Contaminated packaging	: Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

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

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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 (Germany)	: WGK 1 slightly water endangering
(Germany)	

Other regulations :	TRGS 511	'Ammonium nitrate'
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This product is subject to Regulation (EU) 2019/1148; suspicious transactions, disappearance or theft of the product must be reported to the relevant authority.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this product.

SECTION 16: Other information

Full text of H-Statements

Full text of other abbreviations		
H410	: Very toxic to aquatic life with long lasting effects.	
H400	: Very toxic to aquatic life.	
H319	: Causes serious eye irritation.	
H318	: Causes serious eye damage.	
H302	: Harmful if swallowed.	
H272	: May intensify fire; oxidizer.	

Full text of other abbreviations

Acute Tox.		Acute toxicity
Aquatic Acute	:	Acute aquatic toxicity
Aquatic Chronic		Chronic aquatic toxicity
Eye Dam.	:	Serious eye damage
Eye Irrit.		Eye irritation
Ox. Sol.	:	Oxidizing solids

(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

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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 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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