

# Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

## TerraPlus® N 12-4-6



Version: 2.7  
Date of last issue: 23.12.2022  
Date of first issue: 22.03.2016

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06.04.2023

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

#### 1.1 Product identifier

Trade name : TerraPlus® N 12-4-6

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

Use of the Substance/Mixture : Fertilizer

#### 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

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### 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 : EUH210 Safety data sheet available on request.

#### 2.3 Other hazards

According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified.

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### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

Chemical nature : Fertilizer  
organic  
inorganic

#### Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
iron sulphate	7720-78-7  231-753-5  01-2119513203-57-XXXX	Acute Tox. 4; H302 Eye Irrit. 2; H319 Skin Irrit. 2; H315  Acute toxicity estimate  Acute oral toxicity: 500 mg/kg	$\geq 1 - \leq 3$

For explanation of abbreviations see section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

General advice : Avoid contact with skin, eyes and clothing.

If inhaled : Move to fresh air.  
If symptoms persist, call a physician.

In case of skin contact : Wash with water and soap as a precaution.

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.  
Obtain medical attention.

#### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

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#### **4.3 Indication of any immediate medical attention and special treatment needed**

Treatment : Treat symptomatically.

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### **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.

#### **5.2 Special hazards arising from the substance or mixture**

Specific hazards during firefighting : Heating can release hazardous gases.

#### **5.3 Advice for firefighters**

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

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.

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### **SECTION 6: Accidental release measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Avoid dust formation.

#### **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 : Sweep up or vacuum up spillage and collect in suitable container for disposal.

#### **6.4 Reference to other sections**

For personal protection see section 8.

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### **SECTION 7: Handling and storage**

#### **7.1 Precautions for safe handling**

Advice on safe handling : Avoid dust formation.

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Advice on protection against fire and explosion : Keep away from heat and sources of ignition.

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

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep away from heat.

Further information on storage conditions : No special precautions required.

Storage class (TRGS 510) : 11, Combustible Solids

### 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

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
iron sulphate	7720-78-7	TWA	1 mg/m <sup>3</sup> (Iron)	GB EH40

No data available

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

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/m <sup>3</sup>
	Workers	Skin contact	Chronic effects, systemic effects	2,8 mg/kg
Remarks:	Exposure time: 24 h			

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	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
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

### Engineering measures

Provide adequate ventilation.

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### Personal protective equipment

Eye protection : Avoid contact with eyes.

### Hand protection

Remarks : For prolonged or repeated contact use protective gloves.  
The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.

Skin and body protection : No special protective equipment required.

Respiratory protection : respiratory protection only if aerosol or dust is formed.

### Environmental exposure controls

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

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state : solid

Colour : light brown

Odour : characteristic

Odour Threshold : No data available

pH : ca. 5, (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) : not highly flammable

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Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapour pressure	: Not applicable
Relative vapour density	: Not applicable
Relative density	: Not applicable
Bulk density	: ca. 750 kg/m <sup>3</sup>
Solubility(ies)	
Water solubility	: soluble
Partition coefficient: n-octanol/water	: Not applicable
Decomposition temperature	: No decomposition if stored and applied as directed.
Viscosity	
Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: Not applicable
Explosive properties	: Not explosive
Oxidizing properties	: Not considered an oxidizing substance

### 9.2 Other information

No data available

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## 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.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : None reasonably foreseeable.

### 10.4 Conditions to avoid

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

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Avoid moisture.

### 10.5 Incompatible materials

Materials to avoid : None known.

### 10.6 Hazardous decomposition products

In case of fire hazardous decomposition products may be produced such as:, Nitrogen oxides (NO<sub>x</sub>)

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## SECTION 11: Toxicological information

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

#### Acute toxicity

##### Components:

##### **iron sulphate:**

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: May cause skin irritation in susceptible persons.

##### 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.



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### **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.

### **germ cell mutagenicity**

#### **Product:**

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

### **Carcinogenicity**

#### **Product:**

Remarks: Contains no ingredient listed as a carcinogen

### **Components:**

#### **iron sulphate:**

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

### **Reproductive toxicity**

#### **Product:**

Effects on fertility :  
Remarks: Contains no ingredient listed as toxic to reproduction

Effects on foetal development : Remarks: Contains no ingredient listed as toxic to reproduction

### **STOT - single exposure**

#### **Product:**

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

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exposure.

### STOT - repeated exposure

#### Product:

Assessment: The substance or mixture is not classified as specific target organ toxicant, 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: The product contains no substances classified as hazardous to health in concentrations which should be taken into account according to EC directives.

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## SECTION 12: Ecological information

### 12.1 Toxicity

**Product:**

Toxicity to fish : Remarks: No data available

**Components:**

**iron sulphate:**

Ecotoxicology Assessment

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

### 12.2 Persistence and degradability

**Product:**

Biodegradability : Remarks: The organic components of the product are biodegradable.

**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: Does not bioaccumulate.

**Components:**

**iron sulphate:**

Bioaccumulation : Remarks: Accumulation in aquatic organisms is unlikely.

### 12.4 Mobility in soil

**Product:**

Mobility : Remarks: No data available

**Components:**

**iron sulphate:**

Distribution among : Medium:Soil  
environmental compartments Remarks: immobile

### 12.5 Results of PBT and vPvB assessment

**Product:**

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Assessment : Remarks: No data available

### **Components:**

#### **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:**

Additional ecological information : Do not flush into surface water or sanitary sewer system.

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## **SECTION 13: Disposal considerations**

### **13.1 Waste treatment methods**

Product : Fertilizer  
Check if agriculture use is possible.

Contaminated packaging : Offer rinsed packaging material to local recycling facilities.

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## **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

### **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

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### 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.

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### SECTION 16: Other information

#### Full text of H-Statements

H302 : Harmful if swallowed.  
H315 : Causes skin irritation.  
H319 : Causes serious eye irritation.

#### Full text of other abbreviations

Acute Tox. : Acute toxicity  
Eye Irrit. : Eye irritation  
Skin Irrit. : Skin irritation

(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 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

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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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