

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006



Nexur NPK 22-11-23

Version: 1.5
Date of last issue: 23.12.2022
Date of first issue: 27.01.2017

Revision Date:
07.04.2023

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

1.1 Product identifier

Trade name : Nexur NPK 22-11-23

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

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.

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006



Nexur NPK 22-11-23

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Fertilizer
fertilizer contains:
Urea

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
urea	57-13-6 200-315-5 01-2119463277-33-XXXX		<= 50
diammonium hydrogenorthophosphate	7783-28-0 231-987-8 01-2119490974-22-XXXX		<= 50
potassium chloride	7447-40-7 231-211-8		<= 50

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled : Keep patient calm, remove to fresh air, seek medical attention.

In case of skin contact : Wash off with soap and water.
If irritation develops, seek medical attention.

In case of eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Material Safety Data Sheet

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If swallowed : Clean mouth with water and drink afterwards plenty of water.
Consult a physician if necessary.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Irritation
Redness
Nausea
Vomiting
Irregular cardiac activity

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 : Product does not burn, fire-extinguishing activities according to surrounding.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Fire may cause evolution of:
carbon monoxide (CO)
Carbon dioxide (CO₂)
ammonia
Nitrogen oxides (NO_x)
Hydrogen chloride (HCl)
Oxides of phosphorus

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

Personal precautions : Ensure adequate ventilation.

6.2 Environmental precautions

Environmental precautions : Do not let product enter drains.

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Retain and dispose of contaminated wash water.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Take up mechanically and send for disposal.

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 : Protect from contamination.
Keep away from direct sunlight.
Keep away from heat.
Protect from moisture.

Advice on protection against fire and explosion : The product is not flammable. Keep away from combustible materials. Keep away from heat and sources of ignition.

Hygiene measures : At the end of the shift the skin should be cleaned and skin-care agents applied.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : When stored loose do not mix with other fertilizers. Protect from moisture. Keep away from heat. Protect from contamination. Keep away from combustible material.

Storage class (TRGS 510) : 13, Non Combustible Solids

7.3 Specific end use(s)

Specific use(s) : Not relevant

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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

Substance name	End Use	Exposure routes	Potential health effects	Value
urea	Workers	Skin contact		580 mg/kg
Remarks:	Continuous exposure			
	Consumers	Inhalation		125 mg/m3

Material Safety Data Sheet

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Remarks:	Continuous exposure			
	Consumers	Ingestion		42 mg/kg
Remarks:	Continuous exposure			
diammonium hydrogenorthophosphate	Workers	Inhalation	systemic effects	6,1 mg/m ³
	Workers	Skin contact	systemic effects	34,7 mg/m ³ 34,7 mg/kg
Remarks:	Exposure time: 1 DAY			
	Consumers	Ingestion	systemic effects	2,1 mg/kg
Remarks:	Exposure time: 1 DAY			
	Consumers	Skin contact	systemic effects	20,8 mg/kg
Remarks:	Exposure time: 1 DAY			
	Consumers	Inhalation	systemic effects	1,8 mg/m ³
Remarks:	Exposure time: 1 DAY			

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

Substance name	Environmental Compartment	Value
urea	Fresh water	0,047 mg/l
diammonium hydrogenorthophosphate	Marine water	0,17 mg/l
	Fresh water	1,7 mg/l
	Ceiling Limit Value	17 mg/l

8.2 Exposure controls

Personal protective equipment

Eye protection : Tightly fitting safety goggles (splash goggles) (EN 166)

Hand protection

Remarks : Chemical resistant protective gloves (EN 374). chloroprene

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rubber (CR) - 0.5 mm coating thickness butyl rubber (butyl) -
0.7 mm coating thickness polyvinylchloride (PVC) - 0.7 mm
coating thickness

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

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

Particle filter EN 143 Type P1, low efficiency, (solid particles
of inert substances).

Environmental exposure controls

General advice : Do not let product enter drains.
Retain and dispose of contaminated wash water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : prills

Colour : yellow to brownish

Odour : odourless

pH : ca. 6 - 8, Concentration: 100 g/l (20 °C)

Melting point/range : ca. 133 °C

Boiling point/boiling range : Not applicable

Flash point : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : not highly flammable

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Material Safety Data Sheet

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Vapour pressure	: No data available
Density	: ca. 1,2 g/cm ³ (20 °C)
Bulk density	: ca. 950 kg/m ³
Solubility(ies)	
Water solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity	
Viscosity, dynamic	: Not applicable
Explosive properties	: Not explosive

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : Reacts with strong oxidizing agents.
No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid : Avoid electro-static charge.

10.5 Incompatible materials

Materials to avoid : Nitrites
nitrates

10.6 Hazardous decomposition products

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Nexur NPK 22-11-23



Version: 1.5
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Revision Date:
07.04.2023

Hazardous decomposition products : Ammonia gas may be liberated at high temperatures.

SECTION 11: Toxicological information

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

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg
Remarks: The product has not been tested. The information is derived from the properties of the individual components.

Components:

urea:

Acute oral toxicity : LD50 (Rat): 14.300 mg/kg

diammonium hydrogenorthophosphate:

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg

Acute inhalation toxicity : LC50: 5.000 mg/l

Acute dermal toxicity : LD50: > 5.000 mg/kg

potassium chloride:

Acute oral toxicity : LD50 (Rat): 2.600 mg/kg

Skin corrosion/irritation

Product:

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

Components:

diammonium hydrogenorthophosphate:

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Serious eye damage/eye irritation

Product:

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

Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Nexur NPK 22-11-23



Version: 1.5
Date of last issue: 23.12.2022
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Revision Date:
07.04.2023

Components:

diammonium hydrogenorthophosphate:

Species: Rabbit
Method: OECD Test Guideline 405
Result: non-irritant

Respiratory or skin sensitisation

Product:

Remarks: no sensitizing effect
The product has not been tested. The information is derived from the properties of the individual components.

germ cell mutagenicity

Product:

Germ cell mutagenicity - Assessment : Contains no ingredient listed as a mutagen

Carcinogenicity

Product:

Carcinogenicity - Assessment : Contains no ingredient listed as a carcinogen

Reproductive toxicity

Product:

Reproductive toxicity - Assessment : No toxicity to reproduction

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.

Repeated dose toxicity

Components:

Material Safety Data Sheet

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Nexur NPK 22-11-23



Version: 1.5
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urea:

Species: Rat
NOAEL: 2.250 mg/kg
Application Route: Oral

diammonium hydrogenorthophosphate:

Species: Rat
NOAEL: 250 mg/kg

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

Components:

urea:

- Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): > 6.810 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10.000 mg/l
Exposure time: 24 h
- Toxicity to algae : (Scenedesmus quadricauda (Green algae)): > 10.000 mg/l
Exposure time: 192 h

diammonium hydrogenorthophosphate:

- Toxicity to fish : Remarks: No toxic effects occur within the range of solubility.
- Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia (water flea)): 1.790 mg/l
- Toxicity to algae : LC50 (Scenedesmus subspicatus): > 100 mg/l

potassium chloride:

- Toxicity to fish : LC50 (Gambusia affinis (Mosquito fish)): 920 mg/l
Exposure time: 96 h

Material Safety Data Sheet

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Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 825 mg/l
Exposure time: 48 h

Toxicity to algae : IC50 (unspecified algae): 2.500 mg/l
Exposure time: 72 h

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: readily biodegradable

Physico-chemical removability : Remarks: No data available

Components:

diammonium hydrogenorthophosphate:

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:

diammonium hydrogenorthophosphate:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : Remarks: No data available

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

Product:

Additional ecological information : There is a high probability that the product is acute not harmful to aquatic organisms.

Material Safety Data Sheet

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Nexur NPK 22-11-23



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SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Product : 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.

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

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

15.2 Chemical Safety Assessment

SECTION 16: Other information

Full text of other abbreviations

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(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 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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