Gardenien - Dünger

Article number GAA50N60K40F · Extract from the collective safety data sheet “NPK mixtures”

Translation – the German version prevails
Version 2.1
Revised on: 12 November 2026
replaces version 2.0 of 8 September 2026
Print date: 12 November 2026

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

1.1 Product identifier

This safety data sheet is an extract from the collective safety data sheet “NPK mixtures” (version 2.1 of 12 November 2026) for the liquid NPK fertiliser of the GREEN24 brand named below (aqueous NPK solution with trace nutrients).

UFI: not required (mixture not classified as hazardous).

Product identifier (trade name)	Gardenien - Dünger
Article number	GAA50N60K40F (on the label: GAA50N60K40)
Other names (online listings)	ASIN: B00U8L8K9Y
Nutrient declaration (as on the label)	NPK 4.6 + 2.8 + 4.2
Brand	GREEN24
Manufacturer	GREEN24 GmbH, Am Neggenborn 125, D-44892 Bochum (Germany)

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

Relevant identified uses: Fertiliser for gardening and plant cultivation (consumers and professional users).

Uses advised against: Any use other than the fertilisation of plants; do not use as food, feed, biocide or medicinal product.

1.3 Details of the supplier of the safety data sheet

Company name	GREEN24 GmbH
Street	Am Neggenborn 125
Town	D-44892 Bochum (Germany)
Telephone	+49 (0) 234 89016070
Fax	+49 (0) 234 520064409
Email	info@green24.de
Contact person	Frank Dembler — sdb@green24.de
Website	www.green24.de

1.4 Emergency telephone number

Poison emergency service (Giftnotruf) of Charité – Universitätsmedizin Berlin: +49 30 30686700 (24 h, German/English).

The collective safety data sheet has been lodged with the Charité poison emergency service. Outside Germany, also contact the local poison information centre.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

The mixture is not classified as hazardous within the meaning of Regulation (EC) No 1272/2008 [CLP].

Reasoning: No ingredient reaches the concentration limits for classification of the mixture. No ammonium nitrate is added to the NPK mixtures. According to the safety data sheets of the upstream supplier, the base fertilisers contain no hazardous ingredients that have to be stated.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms: not applicable.

Signal word: not applicable.

Hazard statements: not applicable.

Precautionary statements: not applicable.

Supplemental hazard information (EU): not applicable.

2.3 Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to Annex XIII of Regulation (EC) No 1907/2006.

The substances in the mixture are not included in the list established in accordance with Article 59(1) of REACH (candidate list) for having endocrine disrupting properties and do not meet the criteria of Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 for endocrine disrupting properties (assessment for each substance ≥ 0.1 % by weight).

No further hazards are known when the product is used as intended. Large quantities may pollute waters through nutrient input (eutrophication).

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Aqueous NPK fertiliser solution with trace nutrients.

Hazardous ingredients above the thresholds requiring declaration: none.

Ingredients to be stated according to Regulation (EC) No 1272/2008 [CLP] and REACH Annex II:

This mixture contains no components requiring declaration according to REACH Annex II / CLP (no substance hazardous to health or the environment ≥ 1 % by weight, no PBT/vPvB/SVHC ≥ 0.1 % by weight).

SECTION 4: First aid measures

4.1 Description of first aid measures

After inhalation: Move the affected person to fresh air. Seek medical advice if symptoms occur.

After skin contact: Wash immediately with plenty of water and soap. Remove contaminated clothing. Seek medical advice if symptoms persist.

After eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present, and continue rinsing. If irritation persists, consult an eye specialist.

After ingestion: Rinse mouth thoroughly with water. Do not induce vomiting. If feeling unwell, call a poison centre/doctor and show this SDS.

4.2 Most important symptoms and effects, both acute and delayed

No symptoms known to date. Eye contact may cause temporary irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment. No specific antidote known. Show this safety data sheet to the attending doctor or the poison information centre.

SECTION 5: Firefighting measures

5.1 Extinguishing media

The product itself does not burn (aqueous solution).

Suitable extinguishing media: Water spray, water mist, carbon dioxide, dry powder. Fight surrounding fire with suitable media.

Unsuitable extinguishing media: full water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products on exposure to high temperatures: nitrogen oxides (NOx), ammonia, phosphorus oxides, carbon oxides, sulphur oxides, hydrogen chloride.

5.3 Advice for firefighters

Keep self-contained breathing apparatus ready. Do not allow extinguishing water to enter drains, soil or waters.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Spilled product poses a slip hazard. Avoid contact with skin and eyes and the formation of aerosols. Wear personal protective equipment as specified in Section 8. Keep unprotected persons away. Ensure adequate ventilation. Emergency responders: no special protective clothing required beyond Section 8.

6.2 Environmental precautions

Do not allow to enter drains, surface water or groundwater. Inform the competent authorities in the event of a major release.

6.3 Methods and material for containment and cleaning up

Take up with non-combustible absorbent material (sand, earth, vermiculite, diatomaceous earth) and place in suitable containers for disposal (Section 13). Rinse away residues with plenty of water.

6.4 Reference to other sections

Observe the protective provisions in Sections 7, 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when working with the product. Wash hands after use. For personal protective equipment see Section 8. Observe statutory protection and safety regulations.

Information on fire and explosion protection: no special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Protect from heat and direct sunlight. Keep containers tightly closed. Store in original containers or in containers made of the same material. Do not store together with food or animal feed.

Store in well-ventilated, dry and dark rooms above 8 °C and at no more than 38 °C (as stated on the label).

Storage class (TRGS 510, Germany): LGK 12 — non-combustible liquids.

7.3 Specific end use(s)

Fertiliser. Observe the technical data sheet and the instructions for use. Use only at the recommended dilution.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits: according to the safety data sheets of the upstream supplier, no limit values have to be stated for the ingredients.

8.2 Exposure controls

See Section 7. Technical measures take priority over personal protective equipment.

Respiratory protection: Not required when the product is used as intended.

Hand protection: In case of prolonged or repeated contact, protective gloves made of nitrile rubber (NBR), material thickness ≥ 0.4 mm, breakthrough time ≥ 480 min, tested according to EN ISO 374. Observe the information provided by the glove manufacturer.

Eye/face protection: Where there is a risk of splashing, safety goggles with side shields (EN 166).

Body protection: Customary protective work clothing.

Protective measures: After contact, clean the affected skin with water and soap.

Environmental exposure: Do not allow to enter drains or waters.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: liquid **Colour:** green **Odour:** characteristic, faint

a) Physical state	liquid
b) Colour	green
c) Odour	characteristic, faint
d) Melting point/freezing point	≈ 0 °C (aqueous solution)
e) Initial boiling point	≈ 100 °C (aqueous solution)
f) Flammability	Not applicable (aqueous solution).

g) Lower/upper explosion limit	Not applicable (aqueous solution).
h) Flash point	Not applicable (aqueous solution).
i) Auto-ignition temperature	Not determined.
j) Decomposition temperature	Not determined. Decomposition is possible only on strong heating after drying out.
k) pH (20 °C)	approx. 6.9 (derived from the pH values of the base fertilisers, not measured)
l) Kinematic viscosity	Not determined. (aqueous, low viscosity)
m) Solubility	completely miscible with water
n) Partition coefficient n-octanol/water	not applicable (mixture of inorganic salts in water)
o) Vapour pressure (20 °C)	comparable to water
p) Density / relative density (20 °C)	approx. 1.10 g/cm³ (calculated from the formulation)
q) Relative vapour density	Not determined.
r) Particle characteristics	not applicable (liquid)

9.2 Other information No further safety-relevant information. The mixture has no explosive or oxidising properties when composed as intended.

SECTION 10: Stability and reactivity

10.1 Reactivity No hazardous reactions are to be expected when the product is used as intended.

10.2 Chemical stability Stable if the recommended storage and handling conditions are observed (Section 7).

10.3 Possibility of hazardous reactions No hazardous reactions when handled and stored as intended. Reaction with strong alkalis may release ammonia.

10.4 Conditions to avoid Heat, direct sunlight, frost. Do not allow to dry out.

10.5 Incompatible materials Strong alkalis (bases), strong reducing agents, combustible substances in concentrated form.

10.6 Hazardous decomposition products	Does not decompose when used as intended. At high temperatures: nitrogen oxides (NOx), ammonia, phosphorus oxides, carbon oxides, sulphur oxides, hydrogen chloride.

SECTION 11: Toxicological information

No experimental toxicological data are available for the mixture itself. The assessment is based on the available data on the ingredients and on the CLP classification criteria. Based on the available data, the classification criteria are not met for the mixture in any of the hazard classes below (conclusive data at mixture level, not sufficient for classification / calculation).

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

Acute toxicity: Criteria not met.

Skin corrosion/irritation: Criteria not met.

Serious eye damage/irritation: Criteria not met.

Respiratory or skin sensitisation: Criteria not met.

Germ cell mutagenicity, carcinogenicity, reproductive toxicity: Criteria not met. No ingredients of CMR categories 1A or 1B at concentrations of 0.1 % or more. The trace nutrient boron is present as boric acid (Repr. 1B), at no more than 0.057 %.

STOT single / repeated exposure: Criteria not met.

Aspiration hazard: Criteria not met (aqueous solution).

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Contains no substances with endocrine disrupting properties for human health according to REACH Art. 59 / Regulation (EU) 2017/2100 / Regulation (EU) 2018/605 at concentrations ≥ 0.1 %.

11.2.2 Other information

No further relevant information.

SECTION 12: Ecological information

Based on the available data, the CLP classification criteria are not met for the mixture.

12.1 Toxicity	No experimental data on the mixture.
12.2 Persistence and degradability	Inorganic nutrient salts in aqueous solution; the nutrients enter natural material cycles. Not persistent within the meaning of PBT.
12.3 Bioaccumulative potential	No bioaccumulation potential of the main components (inorganic ions).

12.4 Mobility in soil	Very readily soluble in water; mobile in soils. Leaching into groundwater is possible if the product is used improperly.
12.5 Results of PBT and vPvB assessment	The substances in the mixture do not meet the PBT/vPvB criteria according to Annex XIII of REACH.
12.6 Endocrine disrupting properties	Contains no substances with endocrine disrupting properties for the environment according to REACH Art. 59 / Regulation (EU) 2017/2100 / Regulation (EU) 2018/605 at concentrations ≥ 0.1 %.
12.7 Other adverse effects	Nutrient input (nitrogen, phosphorus, possibly potassium/sulphur) may contribute to eutrophication in waters. Do not allow the undiluted product to enter drains or waters. Use only in accordance with the instructions for use.

SECTION 13: Disposal considerations

13.1 Waste treatment methods	Do not allow to enter drains or waters. Dispose of in accordance with Directive 2008/98/EC and national regulations. Small residual quantities can be used up, diluted, by applying them to plants. Suggested waste code (EWC / German AVV): 02 01 09 — agrochemical waste other than those mentioned in 02 01 08. Uncontaminated packaging that has been completely emptied can be recycled. Dispose of packaging that has not been completely emptied in the same way as the product.

SECTION 14: Transport information

This mixture is not classified as dangerous under ADR/RID, IMDG and ICAO/IATA. Not dangerous goods within the meaning of the transport regulations.

14.1 UN number or ID number:	not applicable.
14.2 UN proper shipping name:	not applicable.
14.3 Transport hazard class(es):	not applicable.
14.4 Packing group:	not applicable.
14.5 Environmental hazards:	not applicable. Marine pollutant: no.
14.6 Special precautions for user	Transport in closed, upright and secure containers. Persons transporting the product must know what to do in the event of a release. See Sections 6–8.
14.7 Maritime transport in bulk according to IMO instruments:	not applicable.

SECTION 15: Regulatory information

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

Seveso III Directive 2012/18/EU: The mixture is not classified.

REACH: No substances subject to authorisation (Annex XIV), no relevant restrictions under Annex XVII for the identified use as a fertiliser at the concentrations present.

Regulation (EU) 2019/1148 (explosives precursors): This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions and the disappearance and theft of significant quantities must be reported to the competent national contact point. There is no restriction on supply under Article 5.

Fertiliser legislation: The national fertiliser ordinance (German Düngemittelverordnung, DüMV) and Regulation (EU) 2019/1009 must also be observed. This SDS does not replace fertiliser labelling.

Note under Annex III, Part II of Regulation (EU) 2019/1009 (as on the label): This fertiliser contains urea, which can release ammonia and affect air quality. Depending on local conditions, appropriate remedial measures should be taken.

Water hazard class (German AwSV): WGK 1 — slightly hazardous to water (self-classification).

BetrSichV / TA Luft (Germany): not applicable to the mixture as such.

Employment restrictions: The general provisions on the protection of young people at work and on maternity protection must be observed; no product-specific prohibitions arise because the mixture is not classified.

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture have not been carried out by the supplier of this mixture.

SECTION 16: Other information

Full text of the hazard statements listed in Section 3: not applicable.

Changes compared with version 2.0 of 8 September 2026: Product identifier, article number and other names stated separately (1.1); statement on lodging with the poison emergency service reworded (1.4); reasoning for the classification reworded (2.1); information on ammonium nitrate deleted because no ammonium nitrate is added to the NPK mixtures (2.1, 4.2, 8.1, 11.1); first aid after skin contact corrected (4.1); combustion and decomposition products added (5.2, 10.6); precautions corrected and note for emergency responders added (6.1); storage conditions aligned with the label (7.2); statement on occupational exposure limits reworded (8.1); hand protection and eye protection specified in more detail (8.2); pH value and density stated for the product together with the method of determination, melting point and boiling point without the addition “product-dependent” (9.1); information on boric acid added (11.1); Section 12.1 without reference to Section 8.1; information on Regulation (EU) 2019/1148 corrected and note on urea added (15.1); legal basis added in the header; spelling mistake in Section 5.1 corrected.

Composition review (12 November 2026): The review is based on the mixing proportions of each product and on the safety data sheets of the upstream supplier of the base fertilisers. Boron compounds are below 0.1 % by weight in all mixtures covered. The base fertilisers of the NPK mixtures contain no ingredients classified as hazardous above the thresholds requiring declaration. The non-classification of the mixtures therefore remains unchanged.

This product additionally contains an iron chelate at less than 1 % by weight.

Abbreviations: ADR/RID/IMDG/IATA transport regulations; AGW occupational exposure limit (Germany); CAS Chemical Abstracts Service; CLP Regulation (EC) No 1272/2008; CMR carcinogenic, mutagenic, toxic for reproduction; DNEL/PNEC derived no-effect level / predicted no-effect concentration; PBT/vPvB persistent, bioaccumulative and toxic / very persistent and very bioaccumulative; REACH Regulation (EC) No 1907/2006; SVHC substance of very high concern; WGK water hazard class (Germany).

The information corresponds to the current state of our knowledge and to the applicable EU and national regulations. The product must not be used for any purpose other than that stated in Section 1 without written permission. The user is responsible for compliance with local regulations. This safety data sheet describes safety requirements and does not constitute a guarantee of product properties.

Translation: This document is a translation of the German safety data sheet, version 2.1 of 12 November 2026. In the event of any discrepancy, the German version prevails.