



# Cover Sheet

**For Safety Data Sheets  
„NPK-Liquid Fertilizer“**

Product

**PARK DRIVHUSGØDNING Liquid Fertilizer**

NPK-Value

**3-1-4**

Color

**Green**

Density

**1,15**

Contact:

Am Bahnhof 74 • 27239 Twistringen  
Tel.: +49 4243 411-0 • Fax: +049 4243-888  
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## Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

#### 1.1 Product identifier

#### NPK-Flüssig-Blumendünger

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

##### Relevant identified uses of the substance or mixture:

fertilizer

##### Uses advised against:

No information available at present.

#### 1.3 Details of the supplier of the safety data sheet



Schmees GmbH  
Am Bahnhof 74  
27239 Twistringen  
Deutschland  
Tel.: +49 (0) 42 43 / 4 11-0  
Fax: +49 (0) 42 43 / 4 11-888  
info@schmees.de

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

#### 1.4 Emergency telephone number

##### Emergency information services / official advisory body:

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##### Telephone number of the company in case of emergencies:

+49 (0) 42 43 / 4 11-0 (8:00 - 16:30)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) 1272/2008 (CLP)

The mixture is not classified as dangerous in the terms of the Regulation (EC) 1272/2008 (CLP).

#### 2.2 Label elements

##### Labeling according to Regulation (EC) 1272/2008 (CLP)

Not applicable

#### 2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

### SECTION 3: Composition/information on ingredients

#### 3.1 Substance

n.a.

#### 3.2 Mixture

Ammonium nitrate

Substance with specific conc. limit(s) acc. to REACH-registration

<b>Registration number (REACH)</b>	01-2119490981-27-XXXX
<b>Index</b>	---
<b>EINECS, ELINCS, NLP</b>	229-347-8
<b>CAS</b>	6484-52-2
<b>content %</b>	1-<25
<b>Classification according to Regulation (EC) 1272/2008 (CLP)</b>	Ox. Sol. 3, H272 Eye Irrit. 2, H319

<b>Boric acid</b>	<b>SVHC-substance</b>
<b>Registration number (REACH)</b>	01-2119486683-25-XXXX
<b>Index</b>	005-007-00-2
<b>EINECS, ELINCS, NLP</b>	233-139-2
<b>CAS</b>	10043-35-3
<b>content %</b>	0,01-<2,5
<b>Classification according to Regulation (EC) 1272/2008 (CLP)</b>	Repr. 1B, H360FD

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

#### Inhalation

Not required.

#### Skin contact

Wash in water.

#### Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

#### Ingestion

Rinse the mouth thoroughly with water.

Give copious water to drink. Consult doctor if necessary.

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

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

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

Symptomatic treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

The product does not burn.

Adapt to the nature and extent of fire.

Water jet spray/foam/CO2/dry extinguisher

#### Unsuitable extinguishing media

None known

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

In case of fire the following can develop:

Oxides of carbon

Oxides of nitrogen

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary.

Dispose of contaminated extinction water according to official regulations.



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## SECTION 6: Accidental release measures

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

No special measures required.

### 6.2 Environmental precautions

Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

### 6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth, sawdust) and dispose of according to Section 13.

### 6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

## SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

### 7.1 Precautions for safe handling

#### 7.1.1 General recommendations

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

#### 7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

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

Store product closed and only in original packing.

Not to be stored in gangways or stair wells.

### 7.3 Specific end use(s)

No information available at present.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Ammonium nitrate						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - sewage treatment plant		PNEC	18	mg/l	
Consumer	Human - oral	Long term, systemic effects	DNEL	2,56	mg/kg bw/d	
Consumer	Human - dermal	Long term, systemic effects	DNEL	2,56	mg/kg bw/d	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	8,9	mg/m <sup>3</sup>	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	5,12	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	36	mg/m <sup>3</sup>	

Boric acid						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	1,35	mg/l	
	Environment - marine		PNEC	1,35	mg/l	

	Environment - water, sporadic (intermittent) release		PNEC	9,1	mg/l	
	Environment - sewage treatment plant		PNEC	1,75	mg/l	
	Environment - sediment, freshwater		PNEC	1,8	mg/kg dw	
	Environment - sediment, marine		PNEC	1,8	mg/kg dw	
	Environment - soil		PNEC	5,4	mg/kg dw	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	4,15	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	196	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,98	mg/kg bw/day	
Consumer	Human - oral	Short term, systemic effects	DNEL	0,98	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	8,3	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	392	mg/kg bw/day	

Urea						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,047	mg/l	
Consumer	Human - dermal	Short term, systemic effects	DNEL	580	mg/kg	
Consumer	Human - dermal	Long term, systemic effects	DNEL	580	mg/kg	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	125	mg/m3	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	125	mg/m3	
Consumer	Human - oral	Short term, systemic effects	DNEL	42	mg/kg	
Consumer	Human - oral	Long term, systemic effects	DNEL	42	mg/kg	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	580	mg/kg	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	580	mg/kg	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	292	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	292	mg/m3	

## 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

### 8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Normally not necessary.

Skin protection - Hand protection:



Normally not necessary.

Skin protection - Other:  
Normally not necessary.

Respiratory protection:  
Normally not necessary.

Thermal hazards:  
Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

### 8.2.3 Environmental exposure controls

No information available at present.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Green
Odour:	Characteristic
Odour threshold:	Not determined
pH-value:	>3-8
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	~105
Flash point:	Not determined
Evaporation rate:	Not determined
Flammability (solid, gas):	n.a.
Lower explosive limit:	Not determined
Upper explosive limit:	Not determined
Vapour pressure:	Not determined
Vapour density (air = 1):	Not determined
Density:	1-1,24 g/ml
Bulk density:	n.a.
Solubility(ies):	Not determined
Water solubility:	Soluble
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	Not determined
Explosive properties:	Product is not explosive.
Oxidising properties:	No

### 9.2 Other information

Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	Not determined

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The product has not been tested.

### 10.2 Chemical stability

Stable with proper storage and handling.

### 10.3 Possibility of hazardous reactions

No dangerous reactions are known.

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#### 10.4 Conditions to avoid

None known

#### 10.5 Incompatible materials

None known

#### 10.6 Hazardous decomposition products

No decomposition when used as directed.

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

##### NPK-Flüssig-Blumendünger

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

##### Ammonium nitrate

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	2950	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	> 88,8	mg/l/4h	Rat		Dust
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Irrit. 2
Serious eye damage/irritation:		>=80	%			Eye Irrit. 2
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	No (skin contact)
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Reproductive toxicity:	NOAEL	>=1500	mg/kg bw/d	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developmental Tox. Screening Test)	Analogous conclusion







12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Other adverse effects:							n.d.a.

**Ammonium nitrate**

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	48h	447	mg/l	Cyprinus caprio		
12.1. Toxicity to daphnia:	EC50	48h	490	mg/l	Daphnia magna		
12.1. Toxicity to algae:	EC50	10d	>1700	mg/l			

**Boric acid**

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>800	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to fish:	NOEC/NOEL	34d	1,8	mg/l	Brachydanio rerio		
12.1. Toxicity to fish:	LC50	96h	5600	mg/l	Gambusia affinis		
12.1. Toxicity to fish:	LC50	96h	456	mg/l	Pimephales promelas		
12.1. Toxicity to daphnia:	EC50	48h	133-875	mg/l	Daphnia magna		
12.1. Toxicity to algae:	IC50	72h	192	mg/l	Scenedesmus subspicatus		
12.1. Toxicity to algae:	EC50	72h	229	mg/l	Pseudokirchneria subcapitata		
12.2. Persistence and degradability:							Inorganic products cannot be eliminated from water through biological purification methods.
12.3. Bioaccumulative potential:	Log Pow		-1,25 -- 0,757				Bioaccumulation is unlikely (LogPow < 1),. Not relevant for inorganic substances.
Water solubility:			47	g/l			Soluble 20°C
Water solubility:			379,9	g/l			Soluble 100°C

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****For the substance / mixture / residual amounts**

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)

02 01 99 wastes not otherwise specified

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. suitable incineration plant.

E.g. dispose at suitable refuse site.

**For contaminated packing material**

Pay attention to local and national official regulations.

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

## SECTION 14: Transport information

### General statements

14.1. UN number: n.a.

### Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

Classification code: n.a.

LQ: n.a.

14.5. Environmental hazards: Not applicable

Tunnel restriction code:

### Transport by sea (IMDG-code)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

Marine Pollutant: n.a.

14.5. Environmental hazards: Not applicable

### Transport by air (IATA)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

14.5. Environmental hazards: Not applicable

### 14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Non-dangerous material according to Transport Regulations.

## SECTION 15: Regulatory information

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

Observe restrictions:

Regulation (EC) No 1907/2006, Annex XVII

Ammonium nitrate

Boric acid

General hygiene measures for the handling of chemicals are applicable.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 2 - This product contains the substances listed below:

Entry Nr	Dangerous substances	Notes to Annex I	Qualifying quantity (tonnes) for the application of - Lower-tier requirements	Qualifying quantity (tonnes) for the application of - Upper-tier requirements
1	Ammonium nitrate	13	5000	10000
2	Ammonium nitrate	14	1250	5000
3	Ammonium nitrate	15	350	2500
4	Ammonium nitrate	16	10	50

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2010/75/EU (VOC): 0 %

Gefahrstoffverordnung "Ammoniumnitrat-haltige Zubereitung Gruppe D2" beachten.

### 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

## SECTION 16: Other information

Revised sections: 1, 3, 8, 9, 11, 12, 15



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**Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):**

Not applicable

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H272 May intensify fire, oxidiser.

H360FD May damage fertility. May damage the unborn child.

H319 Causes serious eye irritation.

Ox. Sol. — Oxidising solid

Eye Irrit. — Eye irritation

Repr. — Reproductive toxicity

**Any abbreviations and acronyms used in this document:**

acc., acc. to according, according to  
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)  
AOX Adsorbable organic halogen compounds  
approx. approximately  
Art., Art. no. Article number  
ASTM ASTM International (American Society for Testing and Materials)  
BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)  
BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)  
BSEF The International Bromine Council  
bw body weight  
CAS Chemical Abstracts Service  
CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)  
CMR carcinogenic, mutagenic, reproductive toxic  
DMEL Derived Minimum Effect Level  
DNEL Derived No Effect Level  
dw dry weight  
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance  
EC European Community  
ECHA European Chemicals Agency  
EEC European Economic Community  
EINECS European Inventory of Existing Commercial Chemical Substances  
ELINCS European List of Notified Chemical Substances  
EN European Norms  
EPA United States Environmental Protection Agency (United States of America)  
etc. et cetera  
EU European Union  
EVAL Ethylene-vinyl alcohol copolymer  
Fax. Fax number  
gen. general  
GHS Globally Harmonized System of Classification and Labelling of Chemicals  
GWP Global warming potential  
IARC International Agency for Research on Cancer  
IATA International Air Transport Association  
IBC (Code) International Bulk Chemical (Code)  
IMDG-code International Maritime Code for Dangerous Goods  
incl. including, inclusive  
IUCLID International Uniform Chemical Information Database  
LQ Limited Quantities  
MARPOL International Convention for the Prevention of Marine Pollution from Ships  
n.a. not applicable  
n.av. not available  
n.c. not checked  
n.d.a. no data available  
OECD Organisation for Economic Co-operation and Development  
org. organic  
PBT persistent, bioaccumulative and toxic

PE Polyethylene

PNEC Predicted No Effect Concentration

ppm parts per million

PVC Polyvinylchloride

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)

REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)

SVHC Substances of Very High Concern

Tel. Telephone

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by:

**Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90**

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