

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Potassium nitrate for analysis

Revision date: 16.08.2023

Product code: 15269

Page 1 of 10

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

### 1.1. Product identifier

Potassium nitrate for analysis

REACH Registration Number: 01-2119488224-35-XXXX  
CAS No: 7757-79-1  
EC No: 231-818-8

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

#### Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

#### Uses advised against

Do not use for private purposes (household).

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

Company name: AnalytiChem GmbH  
Street: Stempelstraße 6  
Place: D-47167 Duisburg  
Telephone: 0203/5194-0  
Telefax: 0203/5194-290  
E-mail: info@analytichem.de  
Contact person: Abteilung Produktsicherheit  
Telephone: 0203/5194-107/117  
E-mail: produktsicherheit@analytichem.de  
Internet: www.analytichem.de  
Responsible Department: Abteilung Produktsicherheit

### 1.4. Emergency telephone number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

### Further Information

No data available

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Regulation (EC) No 1272/2008

Ox. Sol. 3; H272

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

#### Regulation (EC) No 1272/2008

Signal word: Warning

Pictograms:



#### Hazard statements

H272 May intensify fire; oxidiser.

#### Precautionary statements

P210

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Potassium nitrate for analysis

Revision date: 16.08.2023

Product code: 15269

Page 2 of 10

P220 Keep away from clothing and other combustible materials.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

#### 2.3. Other hazards

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Sum formula: KNO<sub>3</sub>  
Molecular weight: 101,10 g/mol

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
7757-79-1	potassium nitrate			100 %
	231-818-8		01-2119488224-35-XXXX	
	Ox. Sol. 3; H272			

Full text of H and EUH statements: see section 16.

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
7757-79-1	231-818-8	potassium nitrate	100 %
	inhalation: LC50 = > 0,527 mg/l (dusts or mists); dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 2000 mg/kg		

#### Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

No data available

##### After inhalation

Provide fresh air.

##### After contact with skin

Wash immediately with: Water  
Take off immediately all contaminated clothing and wash it before reuse.

##### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
In case of eye irritation consult an ophthalmologist.

##### After ingestion

Rinse mouth immediately and drink plenty of water.  
Call a physician immediately.

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

Methaemoglobinaemia  
Irritant  
Gastrointestinal complaints

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Potassium nitrate for analysis

Revision date: 16.08.2023

Product code: 15269

Page 3 of 10

Vomiting

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

No data available

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

##### **Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

##### **Unsuitable extinguishing media**

no restriction

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

Non-combustible solids

Oxidizing

Hazardous combustion products

In case of fire may be liberated:

Nitrogen oxides (NO<sub>x</sub>)

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

Do not inhale explosion and combustion gases.

Avoid contact with skin, eyes and clothes.

In case of fire: Wear self-contained breathing apparatus.

#### **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Move undamaged containers from immediate hazard area if it can be done safely.

Use water spray jet to protect personnel and to cool endangered containers.

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

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

##### **For non-emergency personnel**

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Do not breathe dust/fume/gas/mist/vapours/spray.

##### **For emergency responders**

Precautionary statements For emergency responders : Personal protection equipment: see section 8

#### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

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

##### **For containment**

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Take up carefully when dry. Take up dust-free and set down dust-free.

##### **For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.

##### **Other information**

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Potassium nitrate for analysis**

Revision date: 16.08.2023

Product code: 15269

Page 4 of 10

**6.4. Reference to other sections**

Safe handling: see section 7  
Personal protection equipment: see section 8  
Disposal: see section 13

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advice on safe handling**

Handle and open container with care.  
Provide adequate ventilation.  
Avoid contact with skin, eyes and clothes.  
Avoid dust formation. Do not breathe dust.

**Advice on protection against fire and explosion**

Keep away from combustible material.

**Advice on general occupational hygiene**

Take off contaminated clothing.  
Wash hands before breaks and after work.  
When using do not eat or drink.

**Further information on handling**

Take off contaminated clothing and wash it before reuse.  
Wash hands before breaks and after work.

**7.2. Conditions for safe storage, including any incompatibilities**

**Requirements for storage rooms and vessels**

Keep container tightly closed and dry.

**Hints on joint storage**

Keep away from combustible material.

**Further information on storage conditions**

storage temperature +5°C - +30°C

**7.3. Specific end use(s)**

Laboratory chemicals

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**PNEC values**

CAS No	Substance	Value
Environmental compartment		
7757-79-1	potassium nitrate	
Micro-organisms in sewage treatment plants (STP)		18 mg/l

**8.2. Exposure controls**

**Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Suitable eye protection: goggles.

**Hand protection**

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: [vertrieb@kcl.de](mailto:vertrieb@kcl.de) With

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Potassium nitrate for analysis

Revision date: 16.08.2023

Product code: 15269

Page 5 of 10

specification (test according to EN374):

By long-term hand contact

Trade name/designation KCL 741 Dermatril® L

Recommended material: NBR (Nitrile rubber) 0,11 mm

Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation KCL 741 Dermatril® L

Recommended material: NBR (Nitrile rubber) 0,11 mm

Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet (>, <) supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

#### Skin protection

Wear suitable protective clothing.

Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

#### Respiratory protection

Respiratory protection necessary at: dust formation

Filtering device with filter or ventilator filtering device of type: P1

#### Environmental exposure controls

Do not allow to enter into surface water or drains.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	white
Odour:	odourless
Odour threshold:	No data available
Melting point/freezing point:	334 °C
Boiling point or initial boiling point and boiling range:	No data available
Flammability:	not determined
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	X
Auto-ignition temperature:	No data available
Decomposition temperature:	>400 °C
pH-Value (at 20 °C):	5,0 - 7,5 (50 g/l)
Viscosity / kinematic:	No data available
Water solubility: (at 20 °C)	320 g/L
Solubility in other solvents	not determined
Dissolution rate:	No data available
Partition coefficient n-octanol/water:	not determined
Dispersion stability:	No data available
Vapour pressure:	No data available

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Potassium nitrate for analysis

Revision date: 16.08.2023

Product code: 15269

Page 6 of 10

Vapour pressure:	No data available
Density:	No data available
Relative density:	No data available
Bulk density:	~800 kg/m <sup>3</sup>
Relative vapour density:	not determined
Particle characteristics:	No data available

#### 9.2. Other information

##### Information with regard to physical hazard classes

Explosive properties	No data available
Sustaining combustion:	No data available
Self-ignition temperature	
Solid:	not determined
Gas:	not applicable
Oxidizing properties	
The product is: oxidising, Oxidising.	

##### Other safety characteristics

Evaporation rate:	not determined
Solvent separation test:	No data available
Solvent content:	No data available
Solid content:	100%
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
No data available	No data available
No data available	No data available
Viscosity / dynamic:	No data available
Flow time:	No data available

##### Further Information

No data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Possibility of hazardous reactions. oxidising, Oxidising.

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

Fluorine, peroxides, for example hydrogen peroxide  
Aluminium, antimony  
titanium, Zinc  
arsenic, boron  
White/yellow phosphor, Reducing agent  
SULPHUR, Acid  
Metal powder, Combustible substance

### 10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

### 10.5. Incompatible materials

No data available

### 10.6. Hazardous decomposition products

In case of fire may be liberated:  
SECTION 5: Firefighting measures

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Potassium nitrate for analysis**

Revision date: 16.08.2023

Product code: 15269

Page 7 of 10

**Further information**

No data available

**SECTION 11: Toxicological information**

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

**Toxicokinetics, metabolism and distribution**

No data available

**Acute toxicity**

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7757-79-1	potassium nitrate				
	oral	LD50 > 2000 mg/kg	Rat	Other company data (2000)	OECD Guideline 425
	dermal	LD50 > 5000 mg/kg	Rat	Study report (2000)	OECD Guideline 402
	inhalation (4 h) dust/mist	LC50 > 0,527 mg/l	Rat	Study report (2008)	OECD Guideline 403

**Irritation and corrosivity**

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

**Sensitising effects**

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

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

**STOT-single exposure**

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

**STOT-repeated exposure**

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

**Aspiration hazard**

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

**Information on likely routes of exposure**

No data available

**Specific effects in experiment on an animal**

No data available

**Additional information on tests**

No data available

**Practical experience**

No data available

**11.2. Information on other hazards**

**Endocrine disrupting properties**

No data available

**Other information**

No data available

**Further information**

Methaemoglobinaemia

Irritant

Gastrointestinal complaints

Vomiting

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Potassium nitrate for analysis

Revision date: 16.08.2023

Product code: 15269

Page 8 of 10

## SECTION 12: Ecological information

**12.1. Toxicity**

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

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
7757-79-1	potassium nitrate					
	Acute fish toxicity	LC50 > 100 mg/l	96 h	Oncorhynchus mykiss	Study report (2000)	OECD Guideline 203
	Fish toxicity	NOEC 268 mg/l	30 d	juvenile Topeka shiner and with juvenile Fathead m	Study report (2009)	Growth tests estimated the test chemical

**12.2. Persistence and degradability**

The product has not been tested.

**12.3. Bioaccumulative potential**

The product has not been tested.

**12.4. Mobility in soil**

The product has not been tested.

**12.5. Results of PBT and vPvB assessment**

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

**12.6. Endocrine disrupting properties**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

**12.7. Other adverse effects**

The product has not been tested.

**Further information**

Avoid release to the environment.

Do not allow to enter into surface water or drains.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods****Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Do not empty into drains. Send to a physico-chemical treatment facility under observation of official regulations.

Do not mix with other wastes.

**Contaminated packaging**

Handle contaminated packages in the same way as the substance itself.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

## SECTION 14: Transport information

**Land transport (ADR/RID)**

<b>14.1. UN number or ID number:</b>	UN 1486
<b>14.2. UN proper shipping name:</b>	POTASSIUM NITRATE
<b>14.3. Transport hazard class(es):</b>	5.1
<b>14.4. Packing group:</b>	III
Hazard label:	5.1
Classification code:	O2
Limited quantity:	5 kg



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Potassium nitrate for analysis**

Revision date: 16.08.2023

Product code: 15269

Page 9 of 10

Excepted quantity: E1  
 Transport category: 3  
 Hazard No: 50  
 Tunnel restriction code: E

**Inland waterways transport (ADN)**

**14.1. UN number or ID number:** UN 1486  
**14.2. UN proper shipping name:** POTASSIUM NITRATE  
**14.3. Transport hazard class(es):** 5.1  
**14.4. Packing group:** III  
 Hazard label: 5.1  
 Classification code: O2  
 Limited quantity: 5 kg  
 Excepted quantity: E1

**Marine transport (IMDG)**

**14.1. UN number or ID number:** UN 1486  
**14.2. UN proper shipping name:** POTASSIUM NITRATE  
**14.3. Transport hazard class(es):** 5.1  
**14.4. Packing group:** III  
 Hazard label: 5.1  
 Special Provisions: 964, 967  
 Limited quantity: 5 kg  
 Excepted quantity: E1  
 EmS: F-A, S-Q

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number or ID number:** UN 1486  
**14.2. UN proper shipping name:** POTASSIUM NITRATE  
**14.3. Transport hazard class(es):** 5.1  
**14.4. Packing group:** III  
 Hazard label: 5.1  
 Special Provisions: A803  
 Limited quantity Passenger: 10 kg  
 Passenger LQ: Y546  
 Excepted quantity: E1  
 IATA-packing instructions - Passenger: 559  
 IATA-max. quantity - Passenger: 25 kg  
 IATA-packing instructions - Cargo: 563  
 IATA-max. quantity - Cargo: 100 kg

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Warning: Oxidising substances.

**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**

**EU regulatory information**

Information according to 2012/18/EU (SEVESO III): P8 OXIDISING LIQUIDS AND SOLIDS  
 Marketing and use of explosives precursors (Regulation (EU) 2019/1148):

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Potassium nitrate for analysis

Revision date: 16.08.2023

Product code: 15269

Page 10 of 10

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

#### National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).  
Water hazard class (D): 1 - slightly hazardous to water

#### 15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

### SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 9,12.

#### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%  
Ox. Sol: Oxidising solid

#### Relevant H and EUH statements (number and full text)

H272 May intensify fire; oxidiser.