

Trade name: Kalii nitras

Substance number: 064832

Version: 6 / CH

Date revised: 13.06.2024

Replaces Version: 5 / CH

Print date: 13.06.24

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

### **1.1. Product identifier**

Kalii nitras

Item No. 06483200

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

#### **Use of the substance/preparation**

Reagent for analyses

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

#### **Address/Manufacturer**

Hänseler AG

Industriestrasse 35

9100 Herisau

Telephone no. 0041 (0)71 353 58 58

E-mail address of sdb@haenseler.ch

person responsible

for this SDS

### **1.4. Emergency telephone number**

Switzerland :145 / Abroad +41 (0)44 251 51 51

## **SECTION 2: Hazards identification \*\*\***

### **2.1. Classification of the substance or mixture**

#### **Classification (Regulation (EC) No. 1272/2008)**

Classification (Regulation (EC) No. 1272/2008)

Ox. Sol. 3 H272

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008

For explanation of abbreviations see section 16.

### **2.2. Label elements**

#### **Labelling according to regulation (EC) No 1272/2008**

##### **Hazard pictograms**



##### **Signal word**

Warning

##### **Hazard statements**

H272 May intensify fire; oxidizer.

##### **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P221 Take any precaution to avoid mixing with combustibles...

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P501.3 Disposal in compliance with local and national regulations.

Trade name: Kalii nitras

Substance number: 064832

Version: 6 / CH

Date revised: 13.06.2024

Replaces Version: 5 / CH

Print date: 13.06.24

P220  
P370+P378.2Keep away from clothing and other combustible materials.  
In case of fire: Use extinguishing powder for extinction.**2.3. Other hazards**

The Substance does not meet PBT-criteria. This substance does not meet the vPvB-criteria. This substance does not have endocrine disrupting properties with respect to humans. This substance does not have endocrine disrupting properties with respect to non-target organisms.

**SECTION 3: Composition/information on ingredients \*\*\*****Molecular weight**

Value	101.10	g/mol
-------	--------	-------

**Further ingredients \*\*\*****potassium nitrate**

CAS No.	7757-79-1		
EINECS no.	231-818-8		
Registration no.	01-2119488224-35-XXXX		
Concentration	>=	95	%
Advice: [4]			
Classification (Regulation (EC) No. 1272/2008)			
	Ox. Sol. 3	H272	

**Note**

[4] Voluntary information

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

In any case show the physician the Safety Data Sheet.

**After inhalation**

Ensure supply of fresh air.

**After skin contact**

Remove contaminated, soaked clothing immediately and dispose of safely. After contact with skin, wash immediately with plenty of water.

**After eye contact**

Separate eyelids, wash the eyes thoroughly with water (15 min.). Seek medical advice immediately.

**After ingestion**

Drink water in small gulps. By continuous complaints consult a physician.

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

Important or other important known symptoms and effects are described in the GHS labelling of the product (see section 2) and in section 11.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Extinguishing measures to suit surroundings

**Non suitable extinguishing media**

No extinguishing agent restrictions

Trade name: Kalii nitras

Substance number: 064832

Version: 6 / CH

Date revised: 13.06.2024

Replaces Version: 5 / CH

Print date: 13.06.24

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

The product is not combustible. The product supports fire. If a fire breaks out nearby evolution of dangerous gases possible. In the event of fire the following can be released: Nitrous gases (NOx); potassium oxide; Nitrous gases (NOx); Nitrogen oxides (NOx)

**5.3. Advice for firefighters****Special protective equipment for fire-fighting**

Use self-contained breathing apparatus.

**Other information**

Do not discharge into surface waters/groundwater. Collect contaminated fire-fighting water separately, must not be discharged into the drains. Suppress vapours with water spray jet.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Do not inhale dust. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

**6.2. Environmental precautions**

Do not empty into drains.

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

Pick up mechanically. When picked up, treat material as prescribed under Section 13 "Disposal". Clean up affected area. Avoid raising dust.

**6.4. Reference to other sections**

Information regarding waste disposal, see Section 13.

**SECTION 7: Handling and storage \*\*\*****7.1. Precautions for safe handling****Advice on safe handling**

Keep container tightly closed.

**Advice on protection against fire and explosion**

Keep away from ignition sources, fire and open light.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed in a well-ventilated place. Store away from sources of ignition and heat.

**Storage classes**

Storage class according to TRGS 510	5.1B	Oxidising hazardous substances
Storage category (Switzerland)	5	Oxidizing substances, organic peroxides

**Further information on storage conditions**

Keep container tightly closed and dry. Keep away from sources of ignition. Protect from warmth.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Derived No/Minimal Effect Levels (DNEL/DMEL)****potassium nitrate**

Type of value	Derived No Effect Level (DNEL)
Reference group	Worker

Trade name: Kalii nitras

Substance number: 064832

Version: 6 / CH

Date revised: 13.06.2024

Replaces Version: 5 / CH

Print date: 13.06.24

Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	20.8	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	10.9	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	dermal	
Concentration	12.5	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	
Concentration	12.5	mg/kg/d

**Predicted No Effect Concentration (PNEC)****potassium nitrate**

Type of value	PNEC	
Type	Water	
Concentration	0.45	mg/l

**8.2. Exposure controls****General protective and hygiene measures**

Remove contaminated, soaked clothing immediately and dispose of safely. Wash hands before breaks and after work. Observe the usual precautions for handling chemicals.

**Respiratory protection**

Breathing apparatus in the event of aerosol. Particle filter P1; EN 143

**Hand protection**

Gloves  
 Appropriate Material nitrile rubber - NBR  
 Material thickness 0.11 mm  
 Breakthrough time > 480 min  
 Hand protection must comply with EN 374.

**Eye protection**

Safety glasses

**Body protection**

Protective clothing

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state	crystalline
Colour	white

Trade name: Kalii nitras

Substance number: 064832

Version: 6 / CH

Date revised: 13.06.2024

Replaces Version: 5 / CH

Print date: 13.06.24

**Melting point**

Value 334 °C

**Boiling point or initial boiling point and boiling range**

Remarks Not applicable

**Flammability**

Not ignitable

**Upper and lower explosive limits**

Remarks Not applicable

**Flash point**Value °C  
Remarks Not applicable**Ignition temperature**

Remarks Not applicable

**Decomposition temperature**

Remarks No data available

**pH value**Value 5.0 to 7.5  
Concentration/H<sub>2</sub>O 50 g/l  
Temperature 20 °C**Viscosity****dynamic**

Remarks No data available

**Vapour pressure**

Remarks Not applicable

**Density and/or relative density**Value 2.109 g/cm<sup>3</sup>  
Temperature 16 °C**Particle characteristics**Type d50  
Particle size 306.905 µm**9.2. Other information****Solubility in water**Value 320 g/l  
Temperature 20 °C**Bulk density**Value appr. 800 kg/m<sup>3</sup>**SECTION 10: Stability and reactivity****10.1. Reactivity**

No decomposition if stored and applied as directed.

**10.2. Chemical stability**

No decomposition if stored and applied as directed.

**10.3. Possibility of hazardous reactions**

Possible incompatibility with materials listed under section 10.5.

**10.4. Conditions to avoid**

Trade name: Kalii nitras

Substance number: 064832

Version: 6 / CH

Date revised: 13.06.2024

Replaces Version: 5 / CH

Print date: 13.06.24

Flames. Keep away from sources of heat and ignition.

### 10.5. Incompatible materials

Risk of explosion with: Metals, combustible substances, organic substances, sulfides, Boron, Alkaline metals, carbon, sulphur, phosphides, phosphorus, Magnesium, cyanide, peroxides, nitride, Fluorine, halocarbons, Risk of ignition or formation of inflammable gases or vapours with: calcium silicide

### 10.6. Hazardous decomposition products

nitrous oxides (NO<sub>x</sub>), Nitrous gases

## SECTION 11: Toxicological information

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

#### Acute oral toxicity (Components)

##### potassium nitrate

Species	rat		
LD50	3015		mg/kg
Source	IUCLID		

##### potassium nitrate

Species	Rats (male/female)		
LD50	> 2000		mg/kg
Method	OECD 425		

#### Acute dermal toxicity (Components)

##### potassium nitrate

Species	Rats (male/female)		
LD50	> 5000		mg/kg
Method	OECD 402		

#### Acute inhalative toxicity (Components)

##### potassium nitrate

Species	Rats (male/female)		
LC50	> 0.527		mg/l
Duration of exposure	4	h	
Method	OECD 403		

#### Skin corrosion/irritation (Components)

##### potassium nitrate

Species	rabbit		
Observation Period	4	h	
evaluation	non-irritant		
Method	OECD 404		

#### Serious eye damage/irritation (Components)

##### potassium nitrate

Species	rabbit		
evaluation	non-irritant		
Method	OECD 405		

#### Sensitization (Components)

##### potassium nitrate

Species	mouse		
evaluation	non-sensitizing		
Method	OECD 429		

#### Mutagenicity (Components)

##### potassium nitrate

Trade name: Kalii nitras

Substance number: 064832

Version: 6 / CH

Date revised: 13.06.2024

Replaces Version: 5 / CH

Print date: 13.06.24

Species evaluation Salmonella typhimurium  
No mutagenicity in the Ames-test.

**potassium nitrate**

Species evaluation mammal, species unspecified  
No mutagenicity according to various in vitro tests.  
Method OECD 476

**Reproduction toxicity (Components)****potassium nitrate**

Remarks No data available.

**Carcinogenicity (Components)****potassium nitrate**

Remarks No data available.

**Specific Target Organ Toxicity (STOT) (Components)****potassium nitrate**

Remarks No data available.

**11.2 Information on other hazards****Endocrine disrupting properties with respect to humans**

This substance does not have endocrine disrupting properties with respect to humans.

**Experience in practice**

After Swallowing: Irritates the mucous membrane. nausea. vomiting. diarrhea. After resorption of toxic quantities: methaemoglobinaemia. headache. cardiac dysrhythmia. hypotension. dyspnea. spasms. cyanosis

**Other information**

Observe the usual precautions for handling chemicals.

**SECTION 12: Ecological information****12.1. Toxicity****Fish toxicity (Components)****potassium nitrate**

Species rainbow trout (*Oncorhynchus mykiss*)  
LC50 > 100 mg/l  
Duration of exposure 96 h

**potassium nitrate**

Species guppy (*Poecilia reticulata*)  
LC50 191 mg/l  
Duration of exposure 96 h

**Daphnia toxicity (Components)****potassium nitrate**

Species *Daphnia magna*  
EC50 490 mg/l  
Duration of exposure 48 h

**Algae toxicity (Components)****potassium nitrate**

Species Algae  
LC50 > 1700 mg/l  
Duration of exposure 10 d

**Bacteria toxicity (Components)**

Trade name: Kalii nitras

Substance number: 064832

Version: 6 / CH

Date revised: 13.06.2024

Replaces Version: 5 / CH

Print date: 13.06.24

**potassium nitrate**

Species	activated sludge	
EC50	> 1000	mg/l
Duration of exposure	3	h
Method	OECD 209	

**12.2. Persistence and degradability****Biodegradability (Components)****potassium nitrate**

Remarks Inorganic product, cannot be eliminated from the water by biological purification processes.

**12.3. Bioaccumulative potential****General information**

No data available

**12.4. Mobility in soil****Mobility in soil (Components)****potassium nitrate**

Will not adsorb on soil.

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

No data available

**Results of PBT and vPvB assessment**

The Substance does not meet PBT-criteria.  
This substance does not meet the vPvB-criteria.

**12.6 Endocrine disrupting properties****Endocrine disrupting properties with respect to the environment**

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

**12.7. Other adverse effects****General information / ecology**

Do not allow it to reach ground water, water bodies or sewage system.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations for the product**

Disposal in compliance with local and national regulations.

**Disposal recommendations for packaging**

Dispose of as unused product.

**SECTION 14: Transport information \*\*\***

	Land transport ADR/RID ***	Marine transport IMDG/GGVSee ***	Air transport ICAO/IATA ***
14.1. UN number	The product does not constitute a hazardous substance in land transport.	The product does not constitute a hazardous substance in sea transport.	The product does not constitute a hazardous substance in air transport.



Trade name: Kalii nitras

Substance number: 064832

Version: 6 / CH

Date revised: 13.06.2024

Replaces Version: 5 / CH

Print date: 13.06.24

## **SECTION 15: Regulatory information**

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

#### **Water Hazard Class (Germany)**

Water Hazard Class (Germany)	WGK 1
---------------------------------	-------

Remarks	Derivation of WGK according to Annex 1 No. 5.2 AwSV
---------	---

### **15.2. Chemical safety assessment**

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

## **SECTION 16: Other information**

#### **Hazard statements listed in Chapter 3**

H272	May intensify fire; oxidizer.
------	-------------------------------

#### **CLP categories listed in Chapter 3**

Ox. Sol. 3	Oxidising solid, Category 3
------------	-----------------------------

#### **Supplemental information**

Relevant changes compared with the previous version of the safety data sheet are marked with: \*\*\*  
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.