

Trade name: Kalii nitras crist

Substance number: 064816

Version: 5 / CH

Date revised: 10.02.2020

Replaces Version: 4 / CH

Print date: 10.02.20

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

1.1. Product identifier

Kalii nitras crist

Item No. 06481600

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.

SECTION 3: Composition/information on ingredients ***

Further ingredients ***

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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**

Take off contaminated clothing and shoes immediately.

After inhalation

Ensure supply of fresh air. In case of respiratory arrest induce breathing with a respiratory device. Seek medical advice. If necessary, give oxygen. In the event of symptoms take medical treatment.

After skin contact

Wash skin thoroughly with water (15 min.). Remove contaminated, soaked clothing immediately and dispose of safely. Consult a doctor if skin irritation persists.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). By continuous complaints consult a physician.

After ingestion

Rinse out mouth and give plenty of water to drink. Never give anything by mouth to an unconscious person. Summon a doctor immediately.

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

Carbon dioxide, Dry powder, Water spray jet, Extinguishing measures to suit surroundings

5.2. Special hazards arising from the substance or mixture

The product supports fire.

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

Use self-contained breathing apparatus. Wear protective clothing. Cool closed containers exposed to fire with water.

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

Wear protective equipment. Keep away unprotected persons. Keep away sources of ignition. Ensure adequate ventilation.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

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6.3. Methods and material for containment and cleaning up

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Handle and open container with care. Avoid dust formation. Dust deposits that cannot be avoided must be taken up regularly. Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion

The product is not combustible. Oxidizing. Keep away from sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep tightly closed in a dry and cool place.

Hints on storage assembly

Do not store with combustible materials.

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, cool and dry.

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	
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 ³

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	

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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**Exposure controls**

See Section 7. No measures exceeding the ones mentioned necessary.

General protective and hygiene measures

Keep away from food-stuffs, beverages and feed-stocks. Wash hands before breaks and after work. Do not inhale dust/fumes/mist. At work do not eat, drink, smoke or take drugs.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Gloves (alkali-resistant)			
Use	Permanent hand contact		
Reference substance	potassium nitrate		
Appropriate Material	Natural Latex		
Material thickness	0.5	mm	
Breakthrough time	>= 8	h	
Gloves (alkali-resistant)			
Use	Permanent hand contact		
Reference substance	potassium nitrate		
Appropriate Material	Polychloroprene		
Material thickness	0.5	mm	
Breakthrough time	>= 8	h	
Gloves (alkali-resistant)			
Use	Permanent hand contact		
Reference substance	potassium nitrate		
Appropriate Material	nitrile rubber - NBR		
Material thickness	0.35	mm	
Breakthrough time	>= 8	h	
Gloves (alkali-resistant)			
Use	Permanent hand contact		
Reference substance	potassium nitrate		
Appropriate Material	Butyl rubber - Butyl		
Material thickness	0.5	mm	
Breakthrough time	>= 8	h	
Gloves (alkali-resistant)			
Use	Permanent hand contact		
Reference substance	potassium nitrate		
Appropriate Material	Fluoro carbon rubber - FKM		
Material thickness	0.4	mm	
Breakthrough time	>= 8	h	
Gloves (alkali-resistant)			
Use	Permanent hand contact		
Reference substance	potassium nitrate		
Appropriate Material	PVC		
Material thickness	0.5	mm	

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Breakthrough time \geq 8 h**Eye protection**

Safety glasses

Body protection

light protective clothing, rubber

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

Form	solid		
Colour	colourless to white		
Odour	odourless		
Odour threshold	No data available		
pH value	No data available		
Value	4.5	to	8.5
Concentration/H ₂ O	5	%	
Melting point	No data available		
Value	333	to	337 °C
Initial boiling point and boiling range	No data available		
Remarks	not determined		
Flash point	No data available		
Value	°C		
Remarks	Not applicable		
Flammability (solid, gas)	No data available		
Danger of fire if contact with combustible materials.			
Density	No data available		
Value	2.11		g/cm ³
Temperature	20	°C	
Solubility in water	No data available		
Value	316		g/l
Temperature	20	°C	
Partition coefficient: n-octanol/water	No data available		
Remarks	Not applicable		
Decomposition temperature	No data available		
Value	> 400		°C
Explosive properties	No data available		
evaluation	no		
Oxidising properties	No data available		
evaluation	oxidizing		

9.2. Other information**Other information**

The product is not dangerous for explosions.

SECTION 10: Stability and reactivity**10.1. Reactivity**

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Reactions with combustible substances.

10.2. Chemical stability

No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

Oxidising agents

10.4. Conditions to avoid

Keep away from sources of heat and ignition.

10.5. Incompatible materials

Reactions with combustible substances. Reactions with metals in powder form. strong acids, Organic materials, Reaction with Sulfuric acid. Reactions with reducing agents, heavy metals. Potassium permanganate

10.6. Hazardous decomposition products

nitrous oxides (NOx), Toxic gases/vapours

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute oral toxicity (Components)****potassium nitrate**

Species	rat		
LD50		3750	mg/kg

potassium nitrate

Species	rat		
LD50		3015	mg/kg
Source	IUCLID		

Acute dermal toxicity (Components)**potassium nitrate**

Species	rat		
LD50	>	5000	mg/kg
Method	OECD 402		

Skin corrosion/irritation (Components)**potassium nitrate**

Species	rabbit		
evaluation	non-irritant		
Method	OECD 404		
Remarks	Test conducted with a similar formulation.		

Serious eye damage/irritation (Components)**potassium nitrate**

evaluation	non-irritant		
Method	OECD 437		

potassium nitrate

evaluation	slightly irritant		
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Sensitization (Components)**potassium nitrate**

Species	mouse		
evaluation	non-sensitizing		
Method	OECD 429		
Remarks	Test conducted with a similar formulation.		

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Mutagenicity (Components)**potassium nitrate**

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

potassium nitrate

evaluation No mutagenicity according to various in vitro tests.
 Method OECD 476
 Source BM000052 ex80 safety data sheet 20151027.pdf

Reproduction toxicity (Components)**potassium nitrate**

Route of exposure oral
 Species guinea pig
 Dose 10000 ppm(m)

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

Species rainbow trout (*Oncorhynchus mykiss*)
 LC50 > 98.9 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**

LC50 > 1700 mg/l

Bacteria toxicity (Components)**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**Partition coefficient: n-octanol/water**

Remarks Not applicable

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

Will not adsorb on soil.

12.5. Results of PBT and vPvB assessment**Evaluation of persistence and bioaccumulation potential (Components)****potassium nitrate**

Does not bioaccumulate.

potassium nitrate

The product contains no PBT or vPvB substances.

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

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

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

EWC waste code




No not dispose with rubbish.

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
Tunnel restriction code	E		
14.1. UN number	1486	1486	1486
14.2. UN proper shipping name	POTASSIUM NITRATE	POTASSIUM NITRATE	POTASSIUM NITRATE
14.3. Transport hazard class(es)	5.1	5.1	5.1
Label			
14.4. Packing group	III	III	III
Limited Quantity	5 kg		
Transport category	3		

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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

SECTION 16: Other information**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.