

## 1. Identification of the substance / mixture and of the company / undertaking

### 1.1 Product identifier

Product name: Rubidium nitrate  
CAS-No.: 13126-12-0  
EC-No.: 236-060-1

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

Identified use: Laboratory chemical

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

Company: NETZSCH-Gerätebau GmbH  
Wittelsbacherstraße 42  
95100 Selb / Germany

Customer service Phone: +49 9287 881-555

### 1.4 Emergency Phone: +49 9287 881-174 (during office hours)

Fax: +49 9287 881-505

E-mail Address: service@ngb.netzsch.com

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Ox. Sol. 2 H272 May intensify fire; oxidizer.  
Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2 H319 Causes serious eye irritation.  
STOT SE 3 H335 May cause respiratory irritation.

### 2.2 Label elements

#### Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms:  

Signalword: Danger

Hazard statements:	H272 May intensify fire; oxidizer. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
Precautionary statements:	P220 Keep away from combustible materials. P261 Avoid breathing dust/fumes/gas/mist/vapors/spray. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Additional information:	-

### 2.3 Other hazards

All chemicals are potentially dangerous.  
They are therefore only be handled by specially trained personnel with the necessary care.

#### Results of PBT- und vPvB assessment

PBT:	Not applicable.
vPvB:	Not applicable.

## 3. Composition / information on ingredients

### 3.1 Chemical characterization:

#### Substances

CAS-No. Description: 13126-12-0 rubidium nitrate

#### Identification number(s):

EC number:	236-060-1
Formula:	RbNO <sub>3</sub>
Molar mass [g/mol]:	147.47

## 4. First aid measures

### 4.1 Description of first aid measures

General information:	In case of ailments consult a physician. Show this safety data sheet to the doctor in attendance. Remove any clothing soiled by the product.
After inhalation:	Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
After skin contact:	Wash off with soap and plenty of water. If skin irritation continues, consult a doctor.
After eye contact:	Rinse opened eye for 10 minutes under running water. Then consult a doctor.
After swallowing:	Rinse out mouth and then drink water. Seek medical treatment.

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

The most important symptoms and effects are described on the marking label (section 2. 2) and/or in chapter 11.

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

No further relevant information available.

### **5. Fire-Fighting measures**

#### **5.1 Extinguishing agents**

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons unsuitable extinguishing agents: no restrictions of the extinguishing agents

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

Has a fire-promoting effect due to release of oxygen.

In case of fire hazardous combustion gases or vapors possible: nitric oxide (NO<sub>x</sub>), rubidium oxide

#### **In case of fire, the following can be released:**

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

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

Protective equipment: Wear self-contained respiratory protective device.  
Wear fully protective suit.

### **6. Accidental release measures**

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

Wear protective clothing.  
Avoid contact with the eyes and skin.  
Do not breathe dust.

#### **6.2 Environmental precautions**

Do not allow to enter sewers/ surface or ground water.

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

Pick up mechanically.  
Avoid formation of dust.  
Dispose of the material collected according to regulations.

#### **6.4 Reference to other sections**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### **7. Handling and storage**

#### **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of dust. Avoid contact with eyes or skin.

#### **Information about fire and explosion protection:**

Keep ignition sources away - Do not smoke.

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for safe storage, including any incompatibilities:	Storage class (TRGS 510): Oxidizing solids
Information about storage in one common storage facility:	Store away from foodstuffs. Store away from flammable substances.
Further information about storage conditions:	Keep container tightly sealed. Store in cool, dry conditions in a well ventilated place.
Recommended storage temperature:	-

## 7.3 Specific end use(s)

No further relevant information available.

## 8. Exposure controls / personal protection

Additional information about design of technical facilities: No further data; see item 7.

### 8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: Not required.

Additional information: -

### 8.2 Exposure controls

#### Personal protective equipment:

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Avoid contact with the eyes and skin.  
Do not breathe dust.  
Wash hands before breaks and at the end of work.

Individual protection measures: -

Respiratory protection: Required when vapours/aerosols are generated. Filter P3.

Protection of hands: Protective gloves:  
Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.  
Material: Nitrile rubber

Eye protection: Tightly sealed goggles.

Body protection: Protective work clothing.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### General Information

<u>Appearance</u> Form: Colour:	Crystalline powder White
Odour:	Odourless
Odour threshold:	No information available.
pH-value:	No information available.
<u>Change in condition</u> Melting point / Melting range: Boiling point / Boiling range:	310°C Not applicable.
Flash point:	Not applicable.
Flammability (solid, gaseous):	No information available.
Ignition temperature:	Not applicable.
Decomposition temperature:	No information available.
Self-igniting:	Not applicable.
Danger of explosion:	No information available
<u>Explosion limits</u> Lower: Upper:	Not applicable. Not applicable.
Oxidizing properties:	May intensify fire, oxidizer
Vapour pressure:	Not applicable.
Density at 20°C:	3.11 g/cm <sup>3</sup>
Relative density:	No information available.
Vapour density:	Not applicable.
Evaporation rate:	Not applicable.
Solubility in / Miscibility with water:	650 g/l
Partition coefficient (n-octanol / water):	No information available.
<u>Viscosity</u> Dynamic: Kinematic:	Not applicable. Not applicable.

#### 9.2 Other information

No further relevant information available.

## 10. Stability and reactivity

### 10.1 Reactivity

-

### 10.2 Chemical stability sensitive to moisture

#### Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

### 10.3 Possibility of hazardous reactions

Reacts with flammable substances.

Contact with the below mentioned substances may cause violent reactions.

### 10.4 Conditions to avoid

No further relevant information available.

### 10.5 Incompatible materials

Strong acids.

Reducing agents, combustible substances.

### 10.6 Hazardous decomposition products

In case of fire: see item 5.

## 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD / LC50 values relevant  
for classification:

Oral | LD50 | 4625 mg/kg (rat)

#### Potential health effects

Skin:	Irritant to skin and mucous membranes
Eyes:	Irritating effect.
Inhalation:	Irritation symptoms in the respiratory tract.
Ingestion	No information available.
Sensitization:	No data available.

#### CMR effects

Germ cell mutagenicity:	No data available
Carcinogenicity:	2A - Group 2A: Probably carcinogenic to humans (Rubidium nitrate) (IARC)

Reproductive toxicity: No data available.

#### Aspiration hazard:

No data available.

#### Specific target organ toxicity – single exposure:

Inhalation - May cause respiratory irritation.

#### Specific target organ toxicity – repeated exposure:

The substance is not classified as specific target organ toxicant, repeated exposure

**Additional toxicological information:**

No information available.

**Further information:**

The product should be handled with the usual care as necessary for chemicals.

**12. Ecological information****12.1 Toxicity****Aquatic toxicity**

Quantitative data on the ecological effect of this product are not available.

**12.2 Persistence and degradability**

Persistence: No further relevant information available.

Degradability: No further relevant information available.

**12.3 Bioaccumulative potential**

No further relevant information available.

**12.4 Mobility in soil**

No further relevant information available.

**Ecotoxicological effects**

Remark: Do not allow to enter waters, waste water, or soil!

**12.5 Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

**12.6 Other adverse effects**

No further relevant information available.



**13. Disposal considerations****13.1 Waste treatment methods**

Recommendation: Dispose of residual amounts and non-reusable solutions in accordance with local legal regulations. Waste code must be classified as hazardous.

**Uncleaned packaging**

Recommendation: Disposal same as for unused product. Waste codes must be assigned by the user based on the application for which the product was used.

## 14. Transport information

	ADR	IMDG	IATA
<b>14.1 UN-Number</b>	UN1477	UN1477	UN1477
<b>14.2 UN proper shipping name</b>	1477 NITRATES, INORGANIC, N.O.S. (rubidium nitrate)	NITRATES, INORGANIC, N.O.S. (rubidium nitrate)	NITRATES, INORGANIC, N.O.S. (rubidium nitrate)
<b>14.3 Transport hazard class(es) / -label</b>			
<b>14.4 Packing group:</b>	II	II	II
Transport hazard class(es):	5.1 Oxidizing substances.	5.1 Oxidizing substances.	5.1 Oxidizing substances.
Label:	5.1	5.1	5.1
Danger symbol:			
<b>14.5 Environmental hazards:</b>	No	No	No

### 14.6 Special precautions for user

No data available.

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

The cargo is not intended to be carried in bulk.

## 15. Regulatory information

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

#### National regulations:

Information about limitation of use: Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

## 16. Other Information

### Guarantee

This information has been compiled to the best of our knowledge; however, we make no claim as to its completeness and it is meant to serve only as a guideline. NETZSCH-Gerätebau GmbH disclaims any liability for damages which may occur in handling or in contact with these chemicals.

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