

# Safety Data Sheet

## Potassium Nitrate



### 01. Identification

Product name: Potassium Nitrate  
Common name/synonym: Kalisalpetet  
Company: Kemira Danmark A/S  
*Horticulture*  
Kastelsvej 5  
7000 Fredericia  
Denmark  
Tel. 79 22 33 66  
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Medical help and advice: Clinic of Occupational  
Medicine

### 02. Composition

The product is a crystalline product of potassium nitrate with 0,1 % coating agent.

Formula:  $\text{KNO}_3$   
CAS No.: 7757-79-1

### 03. Hazard identification

The product is hazardous only to a certain extent. It may cause irritation to eyes and mucous membrane. When in contact with combustible materials it has an oxidizing effect which increases the fire risk.

### 04. First-aid measures

**Skin:** Wash thoroughly with soap and water. Contaminated clothes should be rinsed before using again in order to reduce the fire risk.

**Eyes:** Rinse immediately with copious of water for at least 15 min. The eye wide open. Seek medical help.

**Inhalation:** Rinse nose, mouth and throat with water

**Ingestion:** Immediately rinse mouth and throat. Drink plenty of water or milk. Do not induce vomiting. Seek medical help.

If inhalation of decomposition gases in a fire immediately seek medical help. Inform of the risk of inhalation of nitrate gases.

### 05. Fire-fighting measures

Potassium nitrate is not combustible. However, it decomposes when heated and liberate toxic nitrate gases. Potassium nitrate is fire feeding. Extinguish the fire with water. Stay in the windward side and use breathing mask for protection against nitrate gases.

### 06. Accidental release measures

Avoid generation of dust when handling of spillage. Use personal protection equipment (see point 8). Sweep up spillage. Can normally be used again as fertilizer.

### 07. Handling and storage

Avoid any handling causing dust formation. Access to water in case of fire and eyewash facility should be available. Store the product in a dry place and without contact with combustible materials. Storing must be in accordance with the regulations of the Department of the Environment, departmental order No. 328 of 87 1983.

### 08. Exposure control/personal protection

If formation of dust cannot be avoided or if ventilation is not adequately use of dust respirator (P2) is necessary. Wear gloves and dust glasses. During work with potassium nitrate eating, drinking, and smoking are not allowed. No threshold limit value has been established for the product.

### 09. Physical and chemical properties

Appearance: Crystalline powder  
Color: White  
Smell: None  
Bulk density: 1.1 -1.2 kg/l  
Melting point: 333° C. Decomposition at approx. 400° C.  
Solubility: Fully soluble in water  
pH: 5-7 in 10% water solution

### 10. Stability and reactivity

Under normal circumstances the product is stable. It is fire feeding (a oxidizing substance) to organic materials. At a temperature over 400° C the product decomposes and develop nitrate gases.

### 11. Toxicological information

Acute toxicity:  
LD<sub>50</sub> (orally, rats) : 3750 mg/kg. The product is not classified as hazardous. It may cause irritation to

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mucous membrane and by ingestion of larger quantities it may cause acute stomach disorders. No long-term adverse effects are known.

### 12. Ecological information

Potassium nitrate may cause damages to the environment like undesirable manurial value. In case of accidental water course contamination inform the appropriate water or environmental authority.

### 13. Disposal

Accumulated spillage can normally be used again as fertilizer material. Dispose of polluted spillage to an authorized waste facility as chemical waste.

### 14. Transport information

IMDG : class 5.1, page 5171  
ADR/RID : class 5.1, point. 22(c)  
UN-No. : 1486  
EmS-No. : 5.1 - 06  
MFAG-No. : 235

### 15. Regulatory information

The product is not classified according to the existing regulations. Attention: Because of the fire feeding properties the product must not be sold to persons under 18 years (Danish act governing fireworks 871 of 23/10 1992).

### 16. Other information

The information stated in point 1-15 is issued from our knowledge of the product. It does not contain any guarantee for special properties. It is important that the person(s) using the above product is/are informed of the exact laws and regulations and that the product is used according to these and for no other purposes than supplied for.

Issued by:

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