



Material Safety Data Sheet

DS7757791

1. Identification

Identification of the product

Catalogue No: **0231/1; 0231/100; 0231/12; PO130**
Product name: **Potassium nitrate**
Synonyms Nitric Acid Potassium Salt, Nitre, Saltpetre

Manufacturer/supplier identification

Company: Scientific & Chemical Supplies Limited
Carlton House, Livingstone Road
Bilston. West Midlands WV14 0QZ

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2. Composition/information on ingredients

Chemical classification

Inorganic salt

CAS number: 7757-79-1 EC-No.: 231-818-8

3. Hazards identification

Contact with combustible material may cause fire.

4. First aid measures

- Eye contact: Irrigate thoroughly with water for at least 10 minutes. If discomfort persists obtain medical attention.
- Inhalation: Remove from exposure, rest and keep warm. In severe cases obtain medical attention.
- Skin contact: Wash off skin thoroughly with water. Remove contaminated clothing and wash before re-use. In severe cases, obtain medical attention.
- Ingestion: Wash out mouth thoroughly with water and give plenty of water to drink. obtain medical attention.

5. Fire-fighting measures

Special risks:

May ignite combustible material. May evolve toxic fumes in fire.

Suitable extinguishing media:

Water spray

6. Accidental release measures

Wear appropriate protective clothing.

Mix solids with wet sand and absorb liquids on an inert absorbent, and transfer carefully to sealed container. Arrange for removal by disposal company. Wash site of spillage thoroughly with water and detergent.

For large spillages liquids should be contained with sand or earth and both liquids and solids transferred to salvage containers. Any residues should be treated as for small spillages.

7. Handling and storage

Handling:

Do not breathe dust. Wash hands and face thoroughly after working with material. Contaminated clothing should be removed and washed before re-use.

Use appropriate containment to avoid environment contamination.

Storage:

Store at room temperature (15 to 25°C recommended). Keep well closed and protected from direct sunlight and moisture. Store away from combustible materials.

8. Exposure controls/personal protection

As appropriate to the situation and the quantity handled.

- Respirator: Dust respirator
- Ventilation: Extraction hood
- Gloves: Rubber or plastic
- Eye Protection: Goggles or face-shield
- Other Precautions: Plastic apron, sleeves, boots - if handling large quantities

9. Physical and chemical properties

Physical State:	Solid
Appearance:	Colourless to white
Odour:	Odourless
pH:	5-8 (50g/l H ₂ O)
Boiling Point:	400°C (decomposition).
Freezing/Melting Point:	334°C
Solubility in water:	Very soluble
Specific Gravity/Density:	2.11
Molecular Formula:	KNO ₃
Molecular Weight:	101.10

10. Stability and reactivity

Stable.

Substances to be avoided : Metals in powder form, combustible substances, organic substances, sulphides, boron, carbon, carbon/sulphur, phosphides, phosphorus, sulphur, magnesium (risk of explosion!).

The possibility of reaction with other substances cannot be excluded.

Hazardous decomposition products : Nitrous gases.

11. Toxicological information

- Eye contact: May irritate.
- Inhalation: May irritate.
- Ingestion: mucosal irritation, nausea, vomiting, diarrhoea.
- Absorption of large quantities: methaemoglobinaemia, headache, cardiac arrhythmia, drop in blood pressure, dyspnoea, spasms.

Further data:

LD50 3750 mg/kg oral, rat.

12. Ecological information

Adverse ecological effects cannot be excluded in the event of improper handling or disposal.

Further data:

Fish toxicity: LC50: 1378 mg/l/96hr (P. reticulate)

Daphnia toxicity: EC50 490mg/l (48hr)

Depending on the concentration, nitrogen compounds may contribute to the eutrophication of water supplies.

13. Disposal considerations

Chemical residues are generally classified as special waste, and as such are covered by regulations which vary according to location. Contact your local waste disposal authority for advice, or pass to a chemical disposal company. Rinse out empty containers thoroughly before returning for recycling.

14. Transport information

UN-No.:	1486	IMDG class: 5.1
IMO:	5.1/1486	Packaging group: III
IATA:	1486	Packaging group: III
Correct technical name:	POTASSIUM NITRATE	
ADR/RID:	5.1,22'(c)	



15. Regulatory information

Labelling according to EC directives

Symbol: O Oxidising.

R-phrases: R8

Contact with combustible material may cause fire.

S-phrases: S16-41

Keep away from sources of ignition - No smoking. In case of fire and/or explosion do not breathe fumes.

EC-No.: 231-818-8

Local Regulations

With the UK the use of this material must be assessed under the Dangerous Substances and Explosive Atmospheres (DSEAR) Regulations.

UK Exposure Limits: None assigned

16. Other information

Date of issue: 21 June 2007

Important Statement

The information above is believed to be accurate and represents the best information currently available from multiple crosschecked sources.

However, we make no warranty express or implied, with respect to such information, and we assume no liability resulting from its use.

Users should make their own investigations to determine the suitability of the information for their particular purposes.

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