
1. Identification

Product Name: Potassium nitrate

Other Name(s): Saltpeter; Niter, potassium salt; Nitric acid, potassium salt

Chemical formula: KNO₃

Proper Shipping Name: Potassium nitrate

UN Number: 1486

Recommended Use: As a fertiliser ingredient

READ SAFETY DATA SHEET BEFORE USE.

Supplier:

Ravensdown Fertiliser Co-operative Ltd

32 Oxford Terrace

PO Box 1049

Christchurch

Customer Centre - ph. 0800 100 123

Email info@ravensdown.co.nz

24 hrs Poisons Advice: National Poisons Centre ph.
0800 POISON / 0800 764 766

2. Hazard Identification

Statement of Hazardous Nature: Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.

Hazard Classification: 5.1.1B, 6.1D, 6.3B, 6.4A, 9.3C



DANGER

Hazard Statements

May intensify fire; oxidiser

Harmful if swallowed.

Harmful if inhaled.

Causes serious eye irritation.

Harmful to terrestrial vertebrates.

3. Composition & Information on Ingredients

Ingredient	CAS Number	Proportion
Potassium nitrate	7757-79-1	99%

4. First Aid Measures

Response Statements

IF SWALLOWED : Rinse mouth. Do NOT induce vomiting.

IF ON SKIN : Wash with plenty of soap and water.

IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

Call a POISON CENTRE or doctor/physician if you feel unwell.

Wash contaminated clothing before reuse.

Never give fluids to an unconscious person.

Poisons & Hazardous Chemicals National Information Centre
phone 0800 POISON / 0800 764 766 (24-hr)

5. Fire Fighting Measures

Will assist combustion, and may be self supporting. May burn fiercely when mixed with metal powders. Is explosive in enclosed spaces.

Extinguishing media: Water. Use water fog to cool intact containers. Prevent run-off from entering waterways.

Fire Fighting Precautions: Full protective equipment, including SCBA.

Combustion products: Potassium oxides, nitrogen oxides (toxic).

Flash point: Not applicable

Flammability limits: Not applicable

Auto-ignition temperature: Not applicable

HAZCHEM Code: 1[Z]

6. Spillage, Accidental Release Measures

Protect yourself and others from injury. Wear appropriate protective equipment (see section 8).

Collect and place in containers. Avoid generating dusts.

7. Handling & Storage

Precautionary Statements

Keep out of reach of children.

Keep away from heat or incompatible materials (Sulphuric acid, potassium permanganate, metallic powders, combustible materials)

Do not breathe dust.

Wash hands thoroughly after handling.

Do not eat drink or smoke when using this product.

Avoid unintended release to the environment.

Safe Handling

Avoid generating dusts. Use only outdoors or in a well ventilated area. Avoid contact with the material.

Storage

Store in closed containers in cool, dry, well ventilated area. Store away from foodstuffs.

8. Exposure Controls & Personal Protection

Exposure Standards

Workplace Exposure Standards (WES):

Particulates not otherwise classified

Inspirable dust 10mg.m⁻³

Respirable dust 3mg.m⁻³

Tolerable Exposure Limit (TEL): Not assigned

Engineering Controls

Ventilation: If dusts are generated use local extraction to control.

PPE

Respiratory: If dusts present wear dust mask

Eyes/Face: Safety glasses. If dusts present wear goggles.

Skin: Gloves, overalls

Eye wash facilities should be available.

Wash hands after working with substance.

9. Physical & Chemical Properties

Appearance: White crystals or granules

Odour: none

pH: (50g.L⁻¹ in water, 20°C) 4.5 – 8.5

Vapour pressure: Not available

Vapour density: Not available

Boiling point: Not applicable

Melting point: 333°C (decomposes above 400°C)

Solubility (water): Soluble

Specific gravity: 2.1 g.cm⁻³

Bulk density: Not available

Flash point: Not applicable

Auto-ignition temperature: Not applicable

10. Stability & Reactivity

Stability: Stable under normal conditions.
Conditions to avoid: Ignition sources, heat.
Materials to avoid: Sulphuric acid, potassium permanganate, metallic powders, combustible materials.

Hazardous decomposition products: Potassium oxides, nitrogen oxides (toxic).
Hazardous polymerisation: Will not occur
Hygroscopic: No

11. Toxicological Information

Health Effects / Symptoms of Exposure

No adverse health effects expected under normal conditions. Avoid eye and skin exposure and inhalation.

Inhalation: Irritant. Elevated exposure may result in mucous membrane irritation (nose & throat).

Skin: Irritant. Prolonged and repeated skin exposure may result in irritation.

Eyes: Irritant. Exposure to dusts may result in irritation and lachrymation.

Ingestion: Ingestion of large quantities may lead to nausea, vomiting, diarrhoea and abdominal cramps.

Acute potassium poisoning is rare but may cause gastric disorders and anaemia.

In some circumstances conversion of nitrates to nitrites may occur in the stomach of some individuals (methaemoglobinaemia). Nitrite exposure can lead to nausea, vomiting, dizziness, rapid heartbeat, irregular breathing, convulsions, coma or death.

Toxicological Data

LD₅₀ (oral, rat) 3750mg.kg⁻¹

12. Ecological Information

Environmental Exposure Limit (EEL): Not assigned

Avoid washing excessive amounts into streams and waterways.

13. Disposal Considerations

Observe any local authority restrictions that may apply. Collection into sealable containers and dispose of in an approved land fill. If practicable apply excess fertiliser at recommended rates to appropriate land. Reuse material where practicable.

Containers: Rinse containers thoroughly prior to re-use. Otherwise render unusable, and dispose of as waste.

14. Transport Information

Regulated for transport under *NZS 5433:1999 Transport of Dangerous Goods on Land* and *Land Transport Rule 45001/1 Dangerous Goods 2005*.

Proper Shipping Name: Potassium nitrate

UN Number: 1486
DG Class: Class 5.1
Packing Group: III

15. Regulatory Information

Exposure limits: (see sections 8, 12)

ERMA Approval : HSR001338

HSNO Controls

Refer 'ERMA User Guide to Controls' for full details.

Location Certification: Required if over threshold
Class 5.1.1B = 500kg (storage) 50kg (in use)

Tracking: Not required

Approved Handlers: Required if over threshold
Class 5.1.1B = 500kg.

16. Other Information

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Revision Information

This revision dated 10 May 2007 – addition of HSNO classifications, hazard and precautionary statements. General review in conjunction with *HSNO Approved Code of Practice : Preparation of Safety Data Sheets*.

Previous revision dated 31 October 2005 (re-write).