

SAFETY DATA SHEET

POTASSIUM NITRATE AR

1. Identification of the substance/preparation and of the company or firm

1.1 Identification of the substance or preparation:

Catalogue no. : KA412

Product name : Potassium nitrate AR

1.2 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

1.3 Identification of the company or firm:

Elago Enterprises Pty Ltd, 5 The Cloisters, Cherrybrook, N.S.W. 2126, Australia

Tel no. (61) 2 98998169

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1.4 Emergency telephone:

(61) 2 98998169 (9:00am - 5:00 pm) [Office hours]

2. Identification of dangers

2.1 Classification of the substance.

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Oxidizing solids, Category 3: May intensify fire; oxidiser.

2.2 Label elements.

Hazard pictograms



Signal words : Warning.

Hazard statements (H) :

H272 : May intensify fire; oxidiser.

Precautionary statements (P) :

P210 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P220 : Keep/Store away from combustible materials

P221 : Take any precaution to avoid mixing with combustibles.

P280 : Wear protective gloves/protective clothing/eye protection/face protection.

P370+P378 : In case of fire: Use appropriate elements to extinction.

P501 : Dispose of contents / container according the regulation.

2.3 Other hazards.

None known.

3. Composition/information on ingredients

3.1 Substance / Preparation.

Potassium nitrate

Formular: KNO_3

CAS No : 7757-79-1

Molecular weight : 101.11

Contains no other components or impurities which will influence the classification of the product.

3.2 Mixture.

Not applicable.

4. First-aid measures

4.1 Description of first aid measures.

Inhaling: Take the person out into the fresh air. If breathing is irregular or stops, perform artificial respiration. Seek medical assistance.

Skin contact: Wash with plenty of water. Remove contaminated clothing.

Eyes: Wash with plenty of water, keeping eyelids open. Seek immediate medical assistance.

Ingestion: Never induce vomiting. Rinse mouth thoroughly with water immediately. Seek immediate medical attention.

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

None known.

4.3 Indication of any immediate medical attention and special treatment needed.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

5. Fire-fighting measures

5.1 Suitable extinguishing media.

Recommended extinguishing methods: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

5.2 Special hazards arising from the substance.

Special risks: Under fire conditions, hazardous fumes will be present.

5.3 Advice for firefighters.

Do not enter fire area without proper protective equipment, including respiratory protection.

Fire protection equipment: According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

6.3 Methods and material for containment and cleaning up.

The contaminated area should be immediately cleaned with an appropriate de-contaminator. Store away from other materials. Collect spillage.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

7. Handling and storage

7.1 Precautions for safe handling.

Ensure good ventilation and renewal of the air in the premises. Avoid breathing dust, fume, gas, mist, vapours, spray.

Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities.

Well sealed containers. In well ventilated premises. Away from sources of ignition and heat. Keep away from oxidising agents and from highly acidic or alkaline materials.

7.3 Specific end use(s).

None.

8. Exposure controls/personal protection

8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values.

The product does NOT contain substances with Biological Limit Values.

8.2 Exposure controls.

Personal protection : Avoid all unnecessary exposure.

Respiratory protection : Wear approved mask.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Others : When using, do not eat, drink or smoke.

9. Physical and chemical properties

Appearance:	Solid.
Colour:	White crystalline powder.
Odour:	No data available.
pH value:	5.0-7.5 (5%, 20 °C).
Melting Point:	334 °C
Boiling Point:	No data available.
Flash point:	No data available.
Flammability (solid, gas) :	No data available.
Lower explosion limit:	No data available.
Upper explosion limit:	No data available.
Evaporation rate :	No data available.
Vapour pressure:	No data available.
Vapour density :	No data available.
Solubility :	320 g/l (20 °C).
Relative density :	2.26 g/ml
Partition coefficient: n-octanol/water:	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	>400 °C
Viscosity :	No data available.
Explosive properties:	No data available.

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

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Unstable in contact with bases.

10.3 Possibility of hazardous reactions.

Neutralization can occur on contact with bases. May intensify fire, oxidiser.

10.4 Conditions to avoid.

Avoid contact with bases.

10.5 Incompatible materials.

Keep away from bases and flammable materials.

10.6 Hazardous decomposition products.

Depending on conditions of use, can be generated corrosive vapors or gases.

11. Toxicological information**11.1 Acute toxicity:** LD50 oral rat : 3 g/kg

Inhalation: Based on available data, the classification criteria are not met.

Dermal: Based on available data, the classification criteria are not met.

Ingestion: Based on available data, the classification criteria are not met.

Corrosion: Based on available data, the classification criteria are not met.

Irritation: Based on available data, the classification criteria are not met.

Sensitization: Based on available data, the classification criteria are not met.

Mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Toxic for reproduction: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

12. Ecological information**12.1 Toxicity.**

Toxicity to fish.

LC50 *Poecilia reticulata* : 191 mg/l; 96 h

Toxicity to Aquatic invertebrates.

EC50 *Daphnia magna* : 490 mg/l; 48 h

12.2 Persistence and Degradability.

Biodegradable.

12.3 Bioaccumulative potential.

Not established.

12.4 Mobility in soil

Not established.

12.5 Results of PBT and vPvB assessment.

The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

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

Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

14. Transport information**14.1 UN number.**

UN No: UN1486

14.2 UN proper shipping name.

ADR: UN 1486, POTASSIUM NITRATE, 5.1, PG III, (E)

IMDG: UN 1486, POTASSIUM NITRATE, 5.1, PG III

ICAO: UN 1486, POTASSIUM NITRATE, 5.1, PG III

14.3 Transport hazard class(es).

Class : 5.1

14.4 Packing group.

Packing group: III

14.5 Environmental hazards.

Marine pollutant: No.

14.6 Special precautions for user.

Labels: 5.1

Hazard number: 50

ADR LQ: 5kg

IMDG LQ: 5 kg

ICAO LQ: 10 kg

Provisions concerning carriage in bulk ADR:

VC1 : Carriage in bulk in sheeted vehicles, sheeted containers or sheeted bulk containers is permitted.

VC2 : Carriage in bulk in closed vehicles, closed containers or closed bulk containers is permitted.

AP6 : If the vehicle or container is made of wood or other combustible material, an impermeable surfacing resistant to combustion or a coating of sodium silicate or similar substance shall be provided. Sheeting shall also be impermeable and non-combustible.

AP7 : Carriage in bulk shall only be as a full load.

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-A, S-Q

Proceed in accordance with point 6.

IMDG Code segregation group: 12 Nitrites and their mixtures

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

The product is not transported in bulk.

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance.

Ensure all national/local regulations are observed.

The product is not affected by REACH Restrictions - Annex XVII

The product is not affected by REACH Authorisation - Annex XIV

15.2 Chemical safety assessment.

Not Scheduled.

16. Other Information

Abbreviations and acronyms :

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

EC50: Effective concentration, 50%

IC50: Inhibitory Concentration, 50%

LC50: Lethal concentration, 50%.

LD50: Lethal dose, 50%.

Log Pow: Logarithm of the partition octanol-water.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Code for Dangerous Goods.

PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative.

Sources of key data used.

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Review number and date.

v. 1.0

Date published.

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Further information.

None.

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

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