Safety Data Sheet

Date of Issue: 20.09.2021 Date of Expiry: 20.09.2026

1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name : **ECP Limited**
Address : PO Box 34125, Birkenhead, Auckland 0746
Telephone : +64 9 480 4386
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Emergency phone number : 0800 243 622 (24 hours)

Product Name	**Potassium Nitrate**
Product Code	**43201**
CAS No.	**7757-79-1**

Recommended use : Laboratory Investigations

2: Hazard's identification

2.1 GHS Classification
Oxidizing liquids or solids (Category C), H272
Acute toxicity, Oral (Category E), H303
Aquatic toxicity (Acute or Chronic) (Category D), H402

2.2 GHS Label elements, including precautionary statements
Pictogram

Signal word : Warning

Hazard statement(s)
H272 May intensify fire; oxidizer.
H303 May be harmful if swallowed.
H402 Harmful to aquatic life.

Precautionary statement(s)
Prevention
P210 Keep away from heat.
P220 Keep/Store away from clothing/ combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response
P312 Call a POISON CENTER/ doctor if you feel unwell.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Disposal
P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards - none

3: Composition/information on ingredients

3.1 Substances

Formula	:	KNO3
Molecular weight	:	101.10 g/mol
CAS-No.	:	7757-79-1
EC-No.	:	231-818-8

4: First aid measures

4.1 Description of first-aid measures
General advice
Consult a physician. Show this material safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
No data available

5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Dry powder Dry sand

5.2 Special hazards arising from the substance or mixture
Nitrogen oxides (NOx)
Potassium oxides
Not combustible.

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
Use water spray to cool unopened containers.

6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

6.2 Environmental precautions
Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

7: Handling and storage

7.1 Precautions for safe handling
Advice on protection against fire and explosion
Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Storage conditions
Keep container tightly closed in a dry and well-ventilated place.
hygroscopic Store under inert gas.

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8: Exposure controls/personal protection

8.1 Control parameters
Ingredients with workplace control parameters
We are not aware of any national exposure limit.

8.2 Exposure controls
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment
Eye/face protection

Personal protective equipment	:	Wear fire/flame resistant/retardant clothing.
Hand protection	:	protective gloves
Eye protection	:	Chemical goggles or safety glasses
Skin and body protection	:	Wear suitable protective clothing
Respiratory protection	:	Wear respiratory protection

9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Molecular mass	:	101.1 g/mol
Colour	:	White crystalline.

Odour	:	odourless.
Odour threshold	:	No data available
pH	:	5.5 - 8
Relative evaporation rate-(butylacetate=1)	:	No data available
Melting point	:	334 °C
Freezing point	:	No data available
Boiling point	:	4000 °C
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density-at 20 °C	:	3
Relative density	:	No data available
Density	:	2.109 g/cm³
Solubility	:	Water: 36 g/100ml
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	May cause fire or explosion; strong oxidiser.
Explosive limits	:	No data available

9.2. Other information
No additional information available

10: Stability and reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
No data available

10.6 Hazardous decomposition products
In the event of fire: see section 5

11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	:	Not classified
Skin corrosion/irritation	:	Not classified pH : 5.5 - 8
Serious eye damage/irritation	:	Not classified pH : 5.5 - 8

Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity (Single exposure)	:	Not classified
Specific target organ toxicity (Repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified

Potential adverse human health effects and symptoms : Harmful if swallowed.

12: Ecological information

12.1 Toxicity

Toxicity to fish :
static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96 h
(OECD Test Guideline 203)
Remarks: (above the solubility limit in the test medium)

Toxicity to daphnia and other aquatic invertebrates :
EC50 - Daphnia magna (Water flea) - 490 mg/l - 48 h
Remarks: (above the solubility limit in the test medium)

Toxicity to algae :
static test ErC50 - diatoms - > 1,700 mg/l - 10 Days
Remarks: (above the solubility limit in the test medium)

Toxicity to bacteria :
EC50 - activated sludge - > 1,000 mg/l - 3 h
(OECD Test Guideline 209)
Remarks: (above the solubility limit in the test medium)

12.2 Persistence and degradability

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects
Discharge into the environment must be avoided.

13: Disposal considerations

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Burn in a

chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.

Contaminated packaging
Dispose of as unused product.

14: Transport Information Table

		ADR/RID – European packaging certification	IMDG International Maritime Dangerous Goods Code	IATA – DGR International Air Travel Association – Dangerous Goods Regulations
14.1	**UN Number**	1486	1486	1486
14.2	**UN Proper Shipping name**	POTASSIUM NITRATE	POTASSIUM NITRATE	Potassium nitrate
14.3	**Transport Hazard Class**	5.1	5.1	5.1
14.4	**Packaging group**	III	III	III
14.5	**Environmental Hazards**	No	No	No
14.6	**Special precautions for user**	None		
14.7	**Hazchem Code**	1Z		

15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulatory information
HSNO Approval Code: HSR001338
HSNO Group Standard Approval: HSR002596 - Laboratory Chemicals and Reagent Kits Group Standard 2006
Tracking Required: not required
Approved Handler Cert.: not required

16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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