## POTASSIUM NITRATE EXTRA PURE MSDS

CAS No: 7757-79-1 MSDS



# **MATERIAL SAFETY DATA SHEET (MSDS)**

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance

:

EC no : 231-818-8 CAS No : 7757-79-1 Product code : 05399

Chemical structure

 $KNO_3$ 

## 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Labogens Fine Chem Industries
1st Floor , Above Bank of India, Guru Vihar , Rahon Road,
Ludhiana Pb. (141007)
+91 9316777775, +91 7707855700
sales@labogens.com - www.Labogens.com

## 1.4. Emergency telephone number

Emergency number : +91 7707855700 (9:00am - 6:00 pm)

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Oxidising Solids, H272

Category 2

Full text of classification categories and H statements : see section 16

## Classification according to Directive 67/548/EEC or 1999/45/EC

O; R8 Xn; R22 Xi; R36/37/38

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Full text of R-phrases: see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available

### 2.2. Label elements

## Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

GHS03

Signal word (CLP) : Danger

Hazard statements (CLP) : H272 - May intensify fire; oxidiser

Precautionary statements (CLP) : P220 - Keep/Store away from clothing/.../combustible materials

### 2.3. Other hazards

No additional information available

## **SECTION 3: Composition/information on ingredients**

## 3.1. Substance

Name : POTASSIUM NITRATE Extra Pure

CAS No : 7757-79-1 EC no : 231-818-8

Full text of R- and H-phrases: see section 16

## 3.2. Mixture

Not applicable

## **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

First-aid measures after skin contact : IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of

water before removing clothes. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical

advice/attention. Specific treatment (see ... on this label).

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. If eye irritation persists: Get medical

advice/attention.

First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

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

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

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

Treat symptomatically.

### **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

Unsuitable extinguishing media : Do not use a heavy water stream.

## 5.2. Special hazards arising from the substance or mixture

Fire hazard : May cause fire or explosion; strong oxidiser.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing

risk of burns and injuries.

#### 5.3. Advice for firefighters

Firefighting instructions : In case of major fire and large quantities: Evacuate area. Fight fire remotely due to

the risk of explosion.

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : No naked lights. No smoking.

## 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

## 6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Stop release.

## 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clear up rapidly by scoop or vacuum.

### 6.4. Reference to other sections

No additional information available

#### **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Additional hazards when processed : Hazardous waste due to potential risk of explosion.

Precautions for safe handling : Take any precaution to avoid mixing with combustibles/... Avoid breathing

dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash ... thoroughly after

handling.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep in fireproof place. Keep container tightly closed.

Incompatible materials : Heat sources. combustible materials.

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#### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

No additional information available

## 8.2. Exposure controls

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

## **SECTION 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/cm<sup>3</sup>

Solubility : Water: 36 g/100ml

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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

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

## 10.2. Chemical stability

May cause fire or explosion; strong oxidiser.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Direct sunlight. Heat. Sparks. Overheating. Open flame.

### 10.5. Incompatible materials

No additional information available

## 10.6. Hazardous decomposition products

No additional information available

## **SECTION 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 : Not classified

exposure)

Specific target organ toxicity (repeated

exposure)

: Not classified

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Aspiration hazard : Not classified

Potential adverse human health effects

and symptoms

: Harmful if swallowed.

## **SECTION 12: Ecological information**

### 12.1. Toxicity

No additional information available

## 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

## 12.6. Other adverse effects

No additional information available

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Product/Packaging disposal

recommendations

: Dispose of contents/container to ...

Additional information

: Hazardous waste due to potential risk of explosion.

### **SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No. (ADR) : 1486 UN-No. (IMDG) : 1486 UN-No.(IATA) : 1486 UN-No.(ADN) : 1486 UN-No. (RID) : 1486

## 14.2. UN proper shipping name

Proper Shipping Name (ADR) : POTASSIUM NITRATE
Proper Shipping Name (IMDG) : POTASSIUM NITRATE
Proper Shipping Name (IATA) : POTASSIUM NITRATE
Proper Shipping Name (ADN) : POTASSIUM NITRATE

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Proper Shipping Name (RID) : POTASSIUM NITRATE

Transport document description (ADR) : UN 1486 POTASSIUM NITRATE, 5.1, III, (E)
Transport document description (IMDG) : UN 1486 POTASSIUM NITRATE, 5.1, III
Transport document description (ADN) : UN 1486 POTASSIUM NITRATE, 5.1, III
Transport document description (ADN) : UN 1486 POTASSIUM NITRATE, 5.1, III
Transport document description (RID) : UN 1486 POTASSIUM NITRATE, 5.1, III

## 14.3. Transport hazard class(es)

### **ADR**

Transport hazard class(es) (ADR) : 5.1
Danger labels (ADR) : 5.1



#### **IMDG**

Transport hazard class(es) (IMDG) : 5.1 Danger labels (IMDG) : 5.1



### IATA

Transport hazard class(es) (IATA) : 5.1 Hazard labels (IATA) : 5.1



## ADN

Transport hazard class(es) (ADN) : 5.1 Danger labels (ADN) : 5.1



## RID

Transport hazard class(es) (RID) : 5.1
Danger labels (RID) : 5.1



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## 14.4. Packing group

Packing group (ADR) : III
Packing group (IMDG) : III
Packing group (IATA) : III
Packing group (ADN) : III
Packing group (RID) : III

#### 14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

### 14.6. Special precautions for user

### - Overland transport

Classification code (ADR) : O2
Limited quantities (ADR) : 5kg
Excepted quantities (ADR) : E1

Packing instructions (ADR) : P002, IBC08, LP02, R001

Special packing provisions (ADR) : B3

Mixed packing provisions (ADR) : MP10

Portable tank and bulk container : T1, BK1, BK2

instructions (ADR)

Portable tank and bulk container special

provisions (ADR)

Tank code (ADR) : SGAV
Tank special provisions (ADR) : TU3
Vehicle for tank carriage : AT
Transport category (ADR) : 3

Special provisions for carriage - Bulk : VC1, VC2, AP6, AP7

(ADR)

Special provisions for carriage - Loading, : CV24

unloading and handling (ADR)

Hazard identification number (Kemler No.) : 50

Orange plates :

50 1486

: TP33

Tunnel restriction code (ADR) : E EAC code : 1Z

## - Transport by sea

Special provision (IMDG) : 964, 967
Limited quantities (IMDG) : 5 kg
Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : P002, LP02
IBC packing instructions (IMDG) : IBC08
IBC special provisions (IMDG) : B3

Tank instructions (IMDG) : T1, BK2, BK3

Tank special provisions (IMDG) : TP33

EmS-No. (Fire) : F-A

EmS-No. (Spillage) : S-Q

Stowage category (IMDG) : A

Stowage and handling (IMDG) : SW23

MFAG-No : 140

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#### - Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y546
PCA limited quantity max net quantity : 10kg

(IATA)

PCA packing instructions (IATA) : 559
PCA max net quantity (IATA) : 25kg
CAO packing instructions (IATA) : 563
CAO max net quantity (IATA) : 100kg
ERG code (IATA) : 5L

## - Inland waterway transport

Classification code (ADN) : 02 Limited quantities (ADN) : 5 kg Excepted quantities (ADN) : E1 : B Carriage permitted (ADN) : PP Equipment required (ADN) : LO04 Provisions prior to loading (ADN) Provisions for carriage in bulk (ADN) : CO02 Number of blue cones/lights (ADN) : 0

Additional requirements/Remarks (ADN) : CO02 and LO04 apply only when this substance is carried in bulk or without

packaging

#### - Rail transport

Classification code (RID) : O2
Limited quantities (RID) : 5kg
Excepted quantities (RID) : E1

Packing instructions (RID) : P002, IBC08, LP02, R001

Special packing provisions (RID) : B3

Mixed packing provisions (RID) : MP10

Portable tank and bulk container : T1, BK1, BK2

instructions (RID)

Portable tank and bulk container special : TP33

provisions (RID)

Tank codes for RID tanks (RID) : SGAV
Special provisions for RID tanks (RID) : TU3
Transport category (RID) : 3

Special provisions for carriage – Bulk : VC1, VC2, AP6, AP7

(RID)

Special provisions for carriage – Loading : CW24

and unloading (RID)

Colis express (express parcels) (RID) : CE11
Hazard identification number (RID) : 50

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

Not applicable

### **SECTION 15: Regulatory information**

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

### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

POTASSIUM NITRATE Extra Pure is not on the REACH Candidate List POTASSIUM NITRATE Extra Pure is not on the REACH Annex XIV List

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### 15.1.2. National regulations

## Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 1, slightly hazardous to water (Classification according to

VwVwS, Annex 2; WGK No 346)

Immission Control Act - 12.BlmSchV

12th Ordinance Implementing the Federal : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

#### **Denmark**

: Young people below the age of 18 years are not allowed to use the product Recommendations Danish Regulation

### **Chemical safety assessment**

No additional information available

### **SECTION 16: Other information**

## Full text of R-, H- and EUH-phrases:

Ox. Sol. 2	Oxidising Solids, Category 2
H272	May intensify fire; oxidiser
R22	Harmful if swallowed
R36/37/38	Irritating to eyes, respiratory system and skin
R8	Contact with combustible material may cause fire
0	Oxidising
Xi	Irritant
Xn	Harmful

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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