

## CERBERO POTASSIUM NITRATE

According to REG. (CE) 1907/2006

### 1. Identification of the substance/preparation and Company

#### Identification of the substance:

Product name:	Cerbero Potassium Nitrate
Chemical name:	Potassium Nitrate
CAS number:	7757-79-1
EC number:	231-818-8
Chemical formula	KNO <sub>3</sub>

#### Use of preparation:

Fertiliser for agriculture

#### Company identification:

ITALPOLLINA SPA – Loc. Casalmenini – 37010 Rivoli Veronese (VR) Italy – tel. 045/6205511 – fax 04576205555 – mail: info@italpollina.it

#### e-mail address of person responsible for SDS:

schede.sicurezza@italpollina.it

#### Emergency telephone number:

(+39) 045 620 55 13 – or contact the nearest Poison Centre..

### 2. Identification of hazards

Potassium Nitrate is classified as **dangerous** according to European Legislation

**It is a strong OXIDIZER.**

**Classification: O – Oxidising. Risk phrases: R8, R36/37/38.**

Contact with other material may cause fire.

Harmful if swallowed or inhaled.

Causes irritation to skin, eyes and respiratory tract.

### 3. Composition/information about ingredients

Chemical name	CAS. N°	EINECS N°	%	Classification
Potassium Nitrate	7757-79-1	231-818-8	50-100	O R8 R36/37/38

**O = Oxidising** – R8 = Contact with combustible material may cause fire

R36/37/38: Irritating to eyes, respiratory system and skin

S-phrases: S2: Keep out of the reach of children. S17: Keep away from combustible material;

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S41: In case of fire and/or explosion do not breathe fumes

Within the current knowledge of the supplier, other ingredients dangerous to human health or environment are not present.

## 4. First-aid measures

**Inhalation:** don't breathe the dust. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.

**Ingestion:** induce vomiting only if directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician immediately.

**Skin contact:** immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician immediately. Wash clothing before reuse.

**Eye contact:** Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Call a physician immediately.

## 5. Fire-fighting measures

**POTASSIUM NITRATE** is not combustible, but it is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. May burn fiercely when mixed with metal powders. It is explosive in enclosed spaces.

**Extinguishing media:** in case of fire, use water or any means suitable for extinguishing surrounding fire. Prevent run-off from entering waterways.

**Hazardous thermal decomposition products:** in case of fire don't breathe dust or vapours coming from combustion material. Dangerous decomposition products are: nitrogen (N) oxides, and potassium (K) oxides.

**Protective equipment:** fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus.

## 6. Measures for accidental release

**Environmental precautions:** avoid contamination of river and sewerage. Inform Authority in case of river contamination. Avoid product dispersion by rain or wind.

**Precautions for personnel:** use appropriate protective equipment. Avoid contamination with released material. Ventilate area of leak or spill. Don't breath the dust. Send out personnel not necessary to the clean up.

**Clean up methods:** pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust. Keep combustibles (wood, paper, oil, etc.) away from spilled material).

## 7. Handling and storage

**Handling:** do not create dusty conditions and avoid wind dispersal. Keep away from combustible, organic, or any other readily oxidizable materials. Avoid all possible sources of ignition (ex. flame). Avoid contamination by others materials (metals, organic materials, ecc.). Use appropriate protective equipment during the handling. Do not eat drink or smoke when using this product.

**Storage:** store away from rain, heat, sparks, flame or any other ignition source. Avoid contact with combustible, organic, or any other readily oxidizable materials. Prevent high moisture in handling and storage. Keep clean and ventilated the storage rooms. Do not store on wooden floors. Containers of this material may be hazardous when empty since they retain product residues (dust, solids). Keep away from kinds and animals. Store in closed containers in cool, dry, well ventilated area. Store away from foodstuffs.

## 8. Personal protection and Exposure controls

**Occupational exposure limits (ACGIH 2003):** Total inhalable dust - 10 mg/m<sup>3</sup>  
Respirable dust - 3 mg/m<sup>3</sup>

**Technical precautionary actions:** avoid dust formation and favour a good ventilation, where necessary.

### CONTROLS OF EXPOSURE

**Respiratory protection:** in case of exposure to dust or mist is apparent and engineering controls are not possible, use respirator. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator.

**Eyes protection:** use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

**Skin protection:** to avoid the contact between the product and the skin, use personal protective equipment for hands and body. Wear protective gloves and clean body-covering clothing.

**Hands protection :** use chemical-resistant gloves (approved standard).

## 9. Chemical and physical properties

### APPEARANCE

**Physical state:** ..... solid (crystals or granules)

**Colour:** ..... white

**Odour:** ..... odourless

### IMPORTANT DATA TO SAFETY

**pH (in solution of water 10%):** ..... 6,5-8

**Specific gravity** ..... 2,1 g/cm<sup>3</sup>

**Melting point:** ..... 330 °C

**Explosive properties:** ..... explosive in enclosed spaces.

**Solubility:** ..... soluble in water

## 10. Stability and reactivity

**Stability:** the product is stable under recommended storage and handling conditions.

**Hazardous decomposition products:** oxides of nitrogen, oxides of potassium and toxic metal fumes may form when heated to decomposition.

**Materials to avoid:** organic and oxidizable materials, Sulphuric acid, potassium permanganate, metallic powders, combustible materials.

**Conditions to avoid:** heat, flame or any other ignition source.

## 11. Toxicological information

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

### Dangerous effects on human health:

- harmful if swallowed or inhaled.
- it causes irritation to skin, eyes and respiratory tract.

DL50 oral rat: 3750 mg/kg

Acute potassium poisoning is rare but may cause gastric disorders and anaemia. In some case, conversion of nitrates to nitrites may occur in the stomach of some man (methaemoglobinaemia). Nitrites exposure can give nausea, dizziness, vomiting, rapid heartbeat, irregular breathing, convulsions, coma or death.

At the moment, are not known effects about: carcinogenicity, mutagenicity, teratogenicity, negative fertility effects, or other dangerous effects on human health.

## 12. Ecological informations

The product is not dangerous to the environment if used as recommended by the supplier.

The product is very soluble in water.

Biodegradability: YES

Bioaccumulation: NO

## 13. Disposal considerations

Within the present knowledge of the Company, the product is considered as hazardous waste. Dispose the product and his packaging according with all applicable local and national laws.

## 14. Informations about transport

Regulatory information	UN Number	Proper Shipping Name	Class	Packing group
ADR/RID	UN1486	POTASSIUM NITRATE	5.1	III
ADNR	UN1486	POTASSIUM NITRATE	5.1	III
IMDG	UN1486	POTASSIUM NITRATE	5.1	III
IATA-DGR	UN1486	POTASSIUM NITRATE	5.1	III

LABEL:



## 15. Regulatory informations

The product is classified according to EU legislation: **O - OXIDISING**

HAZARD SYMBOL



Oxidising

RISK PHRASES: R8 = Contact with combustible material may cause fire  
R36/37/38: Irritating to eyes, respiratory system and skin

SAFETY PHRASES: S2: Keep out of the reach of children. S17: Keep away from combustible material; S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S41: In case of fire and/or explosion do not breathe fumes

Safety data sheet according to REG. CE 1907/2006.

European Law on fertilizers: REG. CE 2003/2003.

## 16. Other informations

Note: -

Safety data sheet by: ITALPOLLINA SPA – Loc. Casalmenini – 37010 Rivoli Veronese (VR) - I.

Version 1.0

Date of issue: 20/04/2008

Date of previous issue: none

### **IMPORTANT NOTICE:**

The data and informations contained in this safety data sheet are based on our knowledge at the date of issue. The informations of this SDS concern only aspects about use, handling and storage of the product. The supplier does not assume any liability whatsoever for the accuracy or completeness of the information contained in this sheet. Final determination and use of suitability of product is completely responsibility of the user. All chemical products may present unknown hazards and must be used with caution. The supplier does not guarantee that the hazards described in this safety data sheet are the only hazards that exist for this product. The supplier does not guarantee that this SDS contains all possible safety measures; in particular conditions, infact, may be necessary added some measures.