



Safety data sheet according to 1907/2006/EC, Article 31

Printing date 06.08.2021

Version number 3.00

Revision: 06.08.2021

* 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Potassium nitrate
- **Article number:** 2338
- **CAS Number:**
7757-79-1
- **EC number:**
231-818-8
- **Registration number** The substance is exempt from REACH-registration.
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the mixture** Ingredient for pharmaceutical drugs
- **Uses advised against** No relevant information available.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
CAELO
Caesar & Loretz GmbH
Herderstr. 31
D-40721 Hilden
GERMANY
- **Further information obtainable from:**
E-mail: info@caelo.de
Tel.: +49210349940 (during regular opening hours)
- **Emergency telephone number:**
Poison Information Center Bonn
Venusberg-Campus 1, 53127 Bonn
Tel: +49 (0) 228-192400

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Ox. Sol. 3 H272 May intensify fire; oxidiser.
- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS03

- **Signal word** Warning

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· Hazard statements

H272 May intensify fire; oxidiser.

· Precautionary statements

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

P220 Keep away from clothing and other combustible materials.

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

P370+P378 In case of fire: Use for extinction: CO₂, powder or water spray.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Other hazards**· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.

3 Composition/information on ingredients

· Chemical characterisation: Substances**· CAS No. Description**

7757-79-1 potassium nitrate

· Identification number(s)**· EC number:** 231-818-8**· INCI-Name** Potassium Nitrate

4 First aid measures

· Description of first aid measures**· After inhalation:** Bring the person out of the contaminated area to fresh air.**· After skin contact:**

Take off contaminated clothes and shoes, wash immediately with plenty of water and soap.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing: If symptoms persist consult doctor.**· Information for doctor:****· Most important symptoms and effects, both acute and delayed**

No further relevant information available.

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

· Extinguishing media**· Suitable extinguishing agents:** Water**· Special hazards arising from the substance or mixture**

Not combustible, but oxidant.

During heating or in case of fire poisonous gases are produced.

· Advice for firefighters**· Protective equipment:** In case of fire wear suitable protective clothes and respiratory protection.

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· Additional information

Prevent from entering into drains. Fire residues must be disposed in accordance with official regulations.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions: Do not allow to enter sewers/ surface or ground water.**· Methods and material for containment and cleaning up:**

Take up dry. Clean up with water.

Dispose contaminated material as waste according to item 13.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· Handling:

· Precautions for safe handling No special precautions are necessary if used correctly.

· Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.

· Conditions for safe storage, including any incompatibilities**· Storage:****· Requirements to be met by storerooms and receptacles:**

Tightly closed. Store at a dry place. At room temperature (+15°C to +25°C).

· Information about storage in one common storage facility: Store away from flammable substances.

· Further information about storage conditions:

Keep away from ignition sources.

Keep away from heat sources.

· Storage class: TRHS 510: 5.1 A Highly oxidising substances

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· Control parameters

· Ingredients with limit values that require monitoring at the workplace: Not required.

· Exposure controls**· Personal protective equipment:****· General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

· Respiratory protection: Dust protection mask.

· Protection of hands: Protective gloves

· Material of gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Safety glasses

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Crystalline

Colour: White

· **Odour:** Odourless

· **Odour threshold:** Not determined.

· **pH-value (50 g/l) at 20 °C:** 5–7.5

· **Change in condition**

Melting point/freezing point: 335 °C

Initial boiling point and boiling range: Undetermined.

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Product is not flammable.

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Not determined.

· **Explosive properties:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: Not determined.

Upper: Not determined.

· **Vapour pressure:** Not applicable.

· **Density at 20 °C:** 2.109 g/cm³

· **Relative density** Not determined.

· **Vapour density** Not applicable.

· **Evaporation rate** Not applicable.

· **Solubility in / Miscibility with water at 25 °C:** 100 g/l

· **Partition coefficient: n-octanol/water:** Not determined.

· **Viscosity:**

Dynamic: Not applicable.

Kinematic: Not applicable.

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- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:**
metals in powder form
combustible substances
organic substances
sulphur
carbon
phosphorous
magnesium
- **Hazardous decomposition products:** Nitrogen oxides

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **LD/LC50 values relevant for classification:**
Oral LD50 2,000 mg/kg (rat)
Dermal LD50 5,000 mg/kg (rat)
Inhalative LC50 527 mg/m³ /4h (rat)
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Slight irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:**
LC50 1,378 mg/L /4d (Fish)
EC50 1,700 mg/L /10d (Algae)

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900 mg/L /4d (invertebrates)

1,000 mg/L /3h (Microorganism)

- **Persistence and degradability** No further relevant information available.

- **Behaviour in environmental systems:**

- **Bioaccumulative potential** Does not accumulate in organisms

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging:**

- **Recommendation:** Disposal must be made according to local regulations.

14 Transport information

- **UN-Number**

- **ADR, IMDG**

UN1486

- **UN proper shipping name**

- **ADR**

1486 POTASSIUM NITRATE

- **IMDG**

POTASSIUM NITRATE

- **Transport hazard class(es)**

- **ADR, IMDG, IATA**

- **Class**

5.1 Oxidising substances.

- **Label**

5.1

- **Packing group**

- **ADR, IMDG, IATA**

III

- **Environmental hazards:**

Not applicable.

- **Special precautions for user**

Warning: Oxidising substances.

- **Hazard identification number (Kemler code):** 50

- **EMS Number:**

5.1-06

- **Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

- **Transport/Additional information:**

- **ADR**

- **Limited quantities (LQ)**

5 kg

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· Transport category	3
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	5 kg

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)** Not listed
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Not listed
- **National regulations:**
- **Storage of hazardous substances in in nonstationary vessels (TRGS 510) (Germany)**
TRHS 510: 5.1 A Highly oxydising substances
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

The information provided is based on our current level of knowledge. This MSDS has been compiled and is exclusively for this product intended.

- **Reasons for alterations** This version replaces all old versions.
- **Abbreviations and acronyms:**
 - ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 - IMDG: International Maritime Code for Dangerous Goods
 - IATA: International Air Transport Association
 - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - Ox. Sol. 3: Oxidizing solids – Category 3
- *** Data compared to the previous version altered.**