

## POTASSIUM NITRATE

### SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

Product Name: Potassium nitrate  
Product Code: CM 23308  
CAS#: 7757-79-1  
Synonym: Not available  
Chemical Name: Not available  
Chemical Formula:  $\text{KNO}_3$   
Formula weight: 101.10

### SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

Composition:  
Name: Potassium nitrate  
Toxicological Data on Ingredients: Not Available

### SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture  
Classification according to Regulation (EC) No 1272/2008  
Oxidizing solids (Category 3), H272  
Potential Acute Health Effects: Not Available  
Potential Chronic Health Effects: Not Available  
Carcinogenic Effects: Not available  
Mutagenic Effects: Not available.  
Teratogenic Effects: Not available.  
Developmental Toxicity: Not Available  
Specific target organ toxicity - Not Available

### SECTION 4: FIRST AID MEASURES

Description of first aid measures  
General advice Consult a physician. Show this 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.  
Most important symptoms and effects, both acute and delay: No data available  
Indication of any immediate medical attention and special treatment needed: No data available

### SECTION 5: FIRE AND EXPLOSION DATA

Extinguishing media  
Suitable extinguishing media :  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Special hazards arising from the substance or mixture  
Nitrogen oxides (NOx)  
Potassium oxides  
Not combustible..



Ambient fire may liberate hazardous vapours.  
Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.  
Environmental precautions Do not let product enter drains.  
Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers.

#### SECTION 7: HANDLING AND STORAGE

Precautions for safe handling : Not available  
Conditions for safe storage, including any incompatibilities  
Keep container tightly closed in a dry and well-ventilated place. Store in cool place.  
hygroscopic Store under inert gas.  
Storage Class:  
Storage class (TRGS 510): 5.1B: Oxidizing hazardous materials  
Specific end use(s) A part from the uses:  
No other specific uses are stipulated.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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 Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).  
Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.  
Body Protection Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.  
Respiratory protection For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).  
Control of environmental exposure Do not let product enter drains.

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form	: Solid
Colour	: White
Odour	: Not available
Odour Threshold	: Not available
pH	: Not available
Melting point/freezing point	: 334°C-lit.
Initial boiling point and boiling range	: Not available
Flash point	: Not available
Evaporation rate	: Not available
Flammability (solid, gas)	: Not available
Upper/lower flammability or explosive limits	: Not available



Vapour pressure	: Not available
Vapour density	: Not available
Relative density	: Not available
Water solubility	: Not available
Partition coefficient	: Not available
Auto-ignition temperature	: Not available

#### SECTION 10: STABILITY AND REACTIVITY DATA

Reactivity: Not available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions Not available

Conditions to avoid : Tin/tin oxides

Incompatible materials: Not available.

Hazardous decomposition products Other decomposition products - In the event of fire

#### SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity:

LD50 Oral - Rat - male and female - > 2.000 mg/kg

LC50 Inhalation - Rat - male and female - 4 h - > 0,527 mg/l

LD50 Dermal - Rat - male and female - > 5.000 mg/kg

Serious eye damage/eye irritation:

Not available

Respiratory or skin sensitization

Not available

Carcinogenicity no data available

#### SECTION 12: ECOLOGICAL INFORMATION

Toxicity:

Toxicity to fish static test LC50 - *Oncorhynchus mykiss* (rainbow trout) - > 100 mg/l - 96 h

Toxicity to daphnia EC50 - *Daphnia magna* (Water flea) - 490 mg/l - 48 h

and other aquatic

invertebrates

Toxicity to algae static test ErC50 - diatoms - > 1.700 mg/l - 10 Days

Toxicity to bacteria EC50 - activated sludge - > 1.000 mg/l - 3 h

Persistence and degradability:

Not Available.

Bioaccumulative potential :Not available

Mobility in soil no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available

Other adverse affects no data available

#### SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods Product Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging Dispose of as unused product.



SECTION 14: TRANSPORT INFORMATION

UN number:		
ADR/RID: 1486	IMDG: 1486	IATA: 1486
UN proper shipping name		
ADR/RID: Potassium Nitrate		
IMDG: Potassium Nitrate		
IATA: Potassium Nitrate		
Transport hazard class(es):		
ADR/RID: 5.1	IMDG: 5.1	IATA: 5.1
Packaging group:		
ADR/RID: III	IMDG: III	IATA: III
Environmental hazards:		
ADR/RID: No	IMDG Marine pollutant: No	IATA: Yes

SECTION 15: OTHER REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture  
This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Other regulations  
Take note of Dir 94/33/EC on the protection of young people at work.

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements.  
H272 May intensify fire; oxidizer  
Special Considerations: Not available

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