

Material Safety Data Sheet

according 1907/2006/EG

POTASSIUM NITRATE, CRYSTALS 13-0-46

1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

Substance name:	POTASSIUM NITRATE, CRYSTALS 13-0-46		
Synonyms:	NITRIC ACID POTASSIUM SALT; E252 FOOD GRADE; NITRATE OF POTASSIUM;		
Type:	Pure substance		
CAS no:	7757-79-1	Formula:	KNO ₃
EINECS no:	231-818-8	Molecular weight:	101.10
EC-no:	-	Reg.no REACH:	

Use of the substance/preparation

- Dissolution Fertilizer

Company/undertaking identification

Name:	Van Iperen International B.V.
Address:	Smidsweg 24
Postal code:	3273 LK
Residence:	Westmaas
Country:	The Netherlands
Telephone no:	+31 (0)186-578888
Fax no:	+31 (0)186-573452
e-Mail:	info@iperen.com
reach-contact	reach-int@iperen.com

Emergency telephone

+44 (0) 870 600 6266 (UK National poisons emergency number)
Exclusively intended to inform doctors at accidental poisonings

2. Hazards identification

Classification according to (EC) No. 1272/2008

Oxidising solid cat. 3.

Classification according to Directive 67/548/EEC

Promotes combustion.

Labelling according regulation (EC) No 1272/2008



WARNING

Hazard statements

H272 May intensify fire; oxidiser.

Precautionary statements

P210	Keep away from heat.— No smoking.
P220	Keep/Store away from clothing and combustible materials.
P221	Take any precaution to avoid mixing with combustibles.

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2. Hazards identification (continue)

Labelling according regulation (CE) 67/548/EEG

Note:



Oxydizing

Risc phrases

R8 Contact with combustible material may cause fire

Safety phrases

S7/8 Keep container tightly closed and dry
S17 Keep away from combustible materials
S24/25 Avoid contact with skin and eyes

3. Composition/information on ingredients

Name	CAS no EINECS no	Concentration	Labeling 67/548/EEG	Labeling EU-GHS
POTASSIUM NITRATE	7757-79-1 231-818-8	> 97%	O	03
	R phrases (1)	8		
	H phrases (1)	H272		

(1)_Complete text of R/H phrases: see chapter 16

4. First aid measures

After inhalation

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

Skin contact

Rinse with water. Soap may be used. Do not apply (chemical) neutralizing agents.
Take victim to a doctor if irritation persists. Wash contaminated clothing before reuse.

Eye contact

Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do.
Continue rinsing. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

After ingestion

Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Victim is fully conscious:
immediately induce vomiting. Induce vomiting by giving a 0.9 % saline solution.
Call Poison Information Centre (www.biq.be/antigif.htm).
Consult a doctor/medical service if you feel unwell.
Ingestion of large quantities: immediately to hospital.
Doctor: administration of chemical antidote application of 100% oxygen methylene blue (intravenous).

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5. Fire-fighting measures

Suitable extinguishing media

EXTINGUISHING MEDIA FOR SURROUNDING FIRES: All extinguishing media allowed.

Unsuitable extinguishing media

not applicable.

Special exposure hazards

On heating/burning: release of toxic and corrosive gases/vapours nitrous vapours.

Decomposes on exposure to temperature rise: release of. Oxygen.

Reacts with (some) acids: release of toxic and corrosive gases/vapours; nitrous vapours.

Violent to explosive reaction with many compounds e.g.: with organic material, with combustible materials, with (some) metals and their compounds and with (strong) reducers.

Instructions

Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat.

Dilute toxic gases with water spray.

Special protective equipment for fire-fighters

Heat/fire exposure: compressed air/oxygen apparatus (SCBA). Heat/fire exposure: gas-tight suit.

6. Accidental release measures

Personal precautions

Care for sufficient ventilation. Avoid raising dust. Keep away from naked flames/heat.

Use suitable means of protection; safety glasses, dust mask, gloves and protective clothing.

Dust cloud production: compressed air/oxygen apparatus.

Reactivity hazard: compressed air/oxygen apparatus. Reactivity hazard: gas-tight suit.

Environmental precautions

Prevent spreading in sewers. Contain released substance, pump into suitable containers.

Plug the leak, cut off the supply. Dam up the solid spill. Knock down/dilute dust cloud with water spray.

If reacting: dilute toxic gas/vapour with water spray. Take account of toxic/corrosive precipitation water.

Methods for containment and cleaning up

Prevent dispersion by covering with dry sand/earth. Scoop solid spill into closing containers.

Spill must not return in its original container. Clean contaminated surfaces with an excess of water.

Wash clothing and equipment after handling.

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7. Handling and storage

Precautions for safe handling

Avoid dust formation. Use suitable means of protection. Avoid contact with the eyes, skin and clothing.
Do not eat, drink or smoke when using this product. Remove contaminated clothing immediately.
Clean contaminated clothing. Keep the substance free from contamination.
Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain.

Conditions for safe storage

Store in a dry area. Fireproof storeroom. Detached building.
Meet the legal requirements.

SUITABLE MATERIAL:

synthetic material, glass.

MATERIAL TO AVOID:

combustible materials. Separated from oxidizing agents, strong bases, and other chemicals.

SPECIAL REQUIREMENTS:

closing dry clean correctly labelled meet the legal requirements. Secure fragile packagings in solid containers.

Specific use(s)

EU-fertilizer.

8. Exposure controls/Personal protection

Exposure limit values

	ppm	mg/m ³ (USA) 5
Legal limit value TWA 8 h:		
Legal limit value STEL 15 min:		
Legal limit value ceiling:		

Exposure controls

Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

RESPIRATORY PROTECTION

Dust production: dust mask with filter type P2.

HAND PROTECTION

Gloves.

GIVE GOOD RESISTANCE: butyl rubber, neoprene rubber.

GIVE POOR RESISTANCE: natural fibres.

EYE PROTECTION

Safety glasses. In case of dust production: protective goggles.

SKIN PROTECTION

Protective clothing.



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9. Physical and chemical properties

General information

Form:	Solid
	Crystalline powder
Odour:	Odourless
Colour:	Colourless-white

Important health, safety and environmental information

pH value:	6/8
Boiling point/boiling range:	-
Flash point/flammability:	-
Min. ignition energy:	-
Vapour pressure:	< 0.001 kPa (20°C)
Relative vapour density:	± 3
Relative gas density:	-
Relative density:	± 2.1 g/cm ³
Rel. dens. sat. mixt. vapor/air:	
Solubility:	Water ± 32 g/100ml Alcohol ± 0.16 g/100ml
Viscosity:	

Other information

Specific conductivity:	
Freezing point:	
Decomposition temperature:	>400 °C
Sublimation temperature:	
Melting point/melting range:	± 334 °C
Auto-ignition temperature:	-
Explosive limit:	-
Explosive limit:	-

10. Stability and reactivity

Conditions to avoid

High temperatures. Unstable on exposure to moisture. Stable under normal conditions.

Materials to avoid

KEEP SUBSTANCE AWAY FROM:

combustible materials, reducing agents, (strong) acids, metals, organic materials.

Hazardous decomposition products

On heating/burning: release of toxic and corrosive gases/vapours nitrous vapours.

Decomposes on exposure to temperature rise: release of. Oxygen.

Reacts with (some) acids: release of toxic and corrosive gases/vapours nitrous vapours.

Violent to explosive reaction with many compounds e.g.:with organic material, with combustible materials, with (some) metals and their compounds and with (strong) reducers.

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11. Toxicological information

Carcinogenity: -
 Skin absorption/sensibility: -
 Mutagenicity:
 Pregnancy:
 LD50 oral rat: ± 3750 mg/kg
 LD50 dermal rat:
 LD50 dermal rabbit:
 LC50 inhalation rat:

ROUTES OF EXPOSURE: INGESTION, INHALATION, EYES AND SKIN

ACUTE EFFECTS/SYMPTOMS

AFTER INHALATION OF DUST:

Dry/sore throat. Coughing. Irritation of the respiratory tract.
 Gastrointestinal complaints. Vomiting. Nausea. Diarrhoea.

AFTER ABSORPTION OF HIGH QUANTITIES:

Blood in stool. Methemoglobinemia.

FOLLOWING SYMPTOMS MAY APPEAR LATER:

Blue/grey discolouration of the skin. Dizziness. Feeling of weakness.
 Disturbances of heart rate. Headache. Disturbances of consciousness. Red skin.

ON CONTINUOUS EXPOSURE/CONTACT:

Tingling/irritation of the skin. Redness of the eye tissue.

ON CONTINUOUS EXPOSURE/CONTACT:

Irritation of the eye tissue.

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:

Skin rash/inflammation. Practic. non-toxic if swallowed (LD50 oral 2000/5000 mg/kg).
 Slightly irritant to skin. Slightly irritant to respiratory organs. Obstructs oxygen absorption.

CHRONIC EFFECTS

Not classified as toxic to reproduction (EC).

Not listed in mutagenicity class (EC,MAK).

Not listed in carcinogenicity class (IARC,EC,TLV,MAK).

12. Ecological information

Ecotoxicity

Mild water pollutant (surface water). Ground water pollutant. Insufficient data available on ecotoxicity.

Slightly harmful to plankton (EC50 >1000 mg/l). May cause eutrophication.

Slightly harmful to invertebrates (Daphnia). (EC50, 48 h, 100/1000 mg/l).

Not harmful to fishes (LC50(96h) >1000 mg/l).

Mobility

Soluble in water.

Persistence and degradability

Biodegradability: not applicable.

Bioaccumulative potential

No bioaccumulation data available.

Other adverse effects

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13. Disposal considerations

Name: POTASSIUM NITRATE
Waste code: 02 01 08* agrochemical waste containing dangerous substances
06 10 02* wastes containing dangerous substances
15 01 10* packaging containing residues of or contaminated by dangerous substances

1st KGA code: VI

2nd KGA code:

PROVISIONS RELATING TO WASTE

Hazardous waste (91/689/EEC).

DISPOSAL METHODS

Do not discharge into surface water. Remove to an authorized waste treatment plant.

14. Transport information

Hazard identification: 50 (ADR)Name: POTASSIUM NITRATE
UN no: 1486 (UN)Name: POTASSIUM NITRATE

	UN	Road	Rail	Inland navigation	IMDG	Air freight
Class:	5.1	5.1	5.1	5.1	5.1	5.1
Group:	III	III	III	III	III	
Subrisks:						-
Label(s) on tanks:		51				
Label(s) on packaging:		51				
Transport Emergency Card:						
Page:						
EMS number:					F-A	
MFAG number:					-	
Marine pollutant:					-	
1st Instruction:						516/Y516
2nd Instruction:						518



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15. Regulatory information

Hazardous components for labelling

Substancename: Potassium nitrate, crystals
Type: Pure substance
CAS no: 7757-79-1
EINECS no: 231-818-8

Further information:

Not listed in Annex I of directive 67/548/EEC et sequens and not listed in Annex VI of directive EG 1272/2008
Labelling established on the basis of the available data.

16. Other information

The complete text of the H phrases mentioned in chapter 3:

R8 Contact with combustible material may cause fire

H272 May intensify fire; oxidiser.

Version –information

Date de mutation: 01-dec-2010
Version: 02.02

List of mutations

CLP classification introduced in chapter 2 and P-phrases corrected

Information for the reader

The information provided in this Safety Data Sheet is given in good faith and belief in its accuracy based on our knowledge of the substance/preparation concerned at the date of publication.
It does not imply the acceptance of any legal liability or responsibility whatsoever by the company for the consequences of its use or misuse in any particular circumstances.

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