

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2015/830)

304B-POTASSIUM NITRATE - POWDER WITH ANTICACKING

Version: 1

Revision date: 18/11/2019



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Print date: 16/01/2020

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING.

1.1 Product identifier.

Product Name: POTASSIUM NITRATE - POWDER WITH ANTICACKING
Product Code: 304B
Chemical Name: Potassium nitrate
CAS No: 7757-79-1
EC No: 231-818-8
Registration No: 01-2119488224-35-0045

1.2 Relevant identified uses of the substance and uses advised against.

Manufacture of matches, pyrotechnics, explosives, oxidant in the chemical industry.
Chemical analysis, chemical production, pharmaceutical production and analysis (chemical synthesis)

Uses advised against:

Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company: **NITROPARIS S. L.**
Address: POL. IND. LA MINA
City: 12520 - NULES
Province: (Castellón) ESPAÑA
Telephone: TEL.+34 964 67 39 27
Fax: +34 964 67 49 84
E-mail: info@nitroparis.com
Web: www.nitroparis.com

1.4 Emergency telephone number: +34 964 67 39 27 (Only available during office hours; Monday-Friday; 08:00-18:00)

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the substance.

In accordance with Regulation (EU) No 1272/2008:

Ox. Sol. 3 : May intensify fire; oxidiser.

2.2 Label elements.

Labelling in accordance with Regulation (EU) No 1272/2008:

Pictograms:



Signal Word:

Warning

H statements:

H272 May intensify fire; oxidiser.

P 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.
P370+P378 In case of fire: Use any appropriate means to extinguish the fire. Use water spray to small fires. Flush with water in case of fire.
P501 Dispose of contents/container in accordance with local legislation/ National

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2.3 Other hazards.

The product may have the following additional risks:
Dustiness.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Chemical Name:	Potassium nitrate
CAS No:	7757-79-1
EC No:	231-818-8
Registration No:	01-2119488224-35-0045

3.2 Mixtures.

Not Applicable.

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

Eye contact.

Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance. Don't let the person rub the affected eye.

Skin contact.

Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners.

Ingestion.

If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

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

No known acute or delayed effects from exposure to the product.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

SECTION 5: FIREFIGHTING MEASURES.

5.1 Extinguishing media.

Suitable extinguishing media:

Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the substance.

Special risks.

Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

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5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Prevent the contamination of drains, surface or subterranean waters, and the ground.

6.3 Methods and material for containment and cleaning up.

The contaminated area should be immediately cleaned with an appropriate de-contaminator. Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

For personal protection, see section 8.

In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety.

Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store according to local legislation. Observe indications on the label. Store the containers between 5 and 25° C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

Classification and threshold amount of storage in accordance with Annex I to Directive 2012/18/EU (SEVESO III):

Code	Description	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
5	Potassium nitrate	5.000	10.000

7.3 Specific end use(s).

Not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

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8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values. The product does NOT contain substances with Biological Limit Values.

Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Type	Value
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Potassium nitrate CAS No: 7757-79-1 EC No: 231-818-8	DNEL (Workers)	Dermal, Long-term, Systemic effects	20,8 (mg/kg/dia)
	DNEL (General population)	Dermal, Long-term, Systemic effects	12,5 (mg/kg/dia)
	DNEL (Workers)	Inhalation, Long-term, Systemic effects	36,7 (mg/m3)
	DNEL (General population)	Inhalation, Long-term, Systemic effects	10,9 (mg/m3)

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.

DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

Concentration levels PNEC:

Name	Details	Value
Potassium nitrate CAS No: 7757-79-1 EC No: 231-818-8	Fresh Water, Continued	0,45 (mg/l)
	Sea water, continued	0,045 (mg/l)
	Water, Emissions	4,5 (mg/l)
	Wastewater treatment plant, continued	18 (mg/l)

PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.

8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %		
Uses:	Manufacture of matches, pyrotechnics, explosives, oxidant in the chemical industry. Chemical analysis, chemical production, pharmaceutical production and analysis (chemical synthesis)		
Breathing protection:			
PPE:	Filter mask for protection against gases and particles.		
Characteristics:	«CE» marking, category III. The mask must have a wide field of vision and an anatomically designed form in order to be sealed and watertight.		
CEN standards:	EN 136, EN 140, EN 405		
Maintenance:	Should not be stored in places exposed to high temperatures and damp environments before use. Special attention should be paid to the state of the inhalation and exhalation valves in the face adaptor.		
Observations:	Read carefully the manufacturer's instructions regarding the equipment's use and maintenance. Attach the necessary filters to the equipment according to the specific nature of the risk (Particles and aerosols: P1-P2-P3, Gases and vapours: A-B-E-K-AX), changing them as advised by the manufacturer.		
Filter Type needed:	A2		
Hand protection:			
PPE:	Protective gloves against chemicals.		
Characteristics:	«CE» marking, category III.		
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420		
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.		
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.		
Material:	PVC (polyvinyl chloride)	Breakthrough time (min.):	> 480
		Material thickness (mm):	0,35
Eye protection:			
If the product is handled correctly, no individual protection equipment is necessary.			
Skin protection:			
PPE:	Chemical protective clothing		

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Characteristics:	«CE» marking, category III. Clothing should fit properly. The level of protection must be set according to a test parameter called BT (Breakthrough Time), which indicates how long it takes for the chemical to pass through the material.
CEN standards:	EN 464, EN 340, EN 943-1, EN 943-2, EN ISO 6529, EN ISO 6530, EN 13034
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.
Observations:	The protective clothing's design should facilitate correct positioning, staying in place without moving for the period of use expected, bearing in mind environmental factors as well as any movement or position the user might adopt while carrying out the activity.
PPE:	Anti-static safety footwear against chemicals.
Characteristics:	«CE» marking, category III. Check the list of chemicals against which the footwear is resistant.
CEN standards:	EN ISO 13287, EN 13832-1, EN 13832-2, EN 13832-3, EN ISO 20344, EN ISO 20345
Maintenance:	For correct maintenance of this kind of safety footwear, it is necessary to observe the instructions specified by the manufacturer. The footwear should be replaced as soon as any sign of damage is observed.
Observations:	The footwear should be cleaned regularly and dried when damp, although it should not be placed too close to a source of heat in order to avoid any sharp changes in temperature.



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance: Solido cristalino

Colour: White

Odour: odourless

Odour threshold: n.a

pH: 8-11 (5%)

Melting point: 333°C a 1013hPa °C

Boiling Point: N.A./N.A.

Flash point: N.A./N.A.

Evaporation rate: no data

Inflammability (solid, gas): n.a

Lower Explosive Limit: n.a

Upper Explosive Limit: n.a

Vapour pressure: n.a

Vapour density: n.a

Relative density: 1.14-1.3

Solubility: 30-31.6 g /100cm³

Liposolubility: n.a

Hydrosolubility: n.a

Partition coefficient (n-octanol/water): n.a

Auto-ignition temperature: n.a.°C

Decomposition temperature: >600°C

Viscosity: n.a

Explosive properties: not explosive

Oxidizing properties: Oxidizer (analysis UN 0.1)

N.A./N.A.= Not Available/Not Applicable due to the nature of the product

9.2 Other information.

Dropping point: n.a

Blink: n.a

Kinematic viscosity: n.a

N.A./N.A.= Not Available/Not Applicable due to the nature of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

There are no hazardous reactions when stored and treated in accordance with the regulations.

10.2 Chemical stability.

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Stable under normal temperature and storage conditions.

10.3 Possibility of hazardous reactions.

None identified.

10.4 Conditions to avoid.

Do not store together with : Flammable, combustible, reducing agents, strong acid and empty pallets.

10.5 Incompatible materials.

Flammable, combustible, strong acids and reducing agents under specific conditions.

10.6 Hazardous decomposition products.

Thermal decomposition products: oxides of nitrogen (NOx), potassium nitrite and potassium oxide.

SECTION 11: TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects.

Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

Splatters in the eyes can cause irritation and reversible damage.

Toxicological information.

Name	Acute toxicity			
	Type	Test	Kind	Value
Potassium nitrate	Oral	DL50	Rat	>2000 mg/kg pc
	Dermal	DL50	Rat	>5000 mg/kg pc
	Inhalation	CL50	Rat	>0.527 mg/l (4h) [1]
CAS No: 7757-79-1 EC No: 231-818-8		[1] Maximum attainable concentration		

A) acute toxicity;

- Acute toxicity LD50:> 2000mg / kg bw. Rat. OECD guideline No 425. Data obtained by conclusion by analogy.
 - Acute toxicity by cutaneous route LD50:> 5000mg / kg bw. Rat. OECD Guideline No 402.
 - Acute inhalation toxicity LC50:> 0.527 mg / l (4h). Rat. OECD guideline No 403 (maximum achievable concentration).
- Based on the available data, the classification criteria are not met.

B) skin corrosion or irritation;

Equivalent or similar to OECD guideline 404. Not irritating. Rabbit. Data obtained by conclusion by analogy
Based on the available data, the classification criteria are not met.

C) serious eye damage or eye irritation;

OECD Guideline No 437.No irritant. In vitro study.
OECD Guideline 405 / EU B.5. Not irritating. Rabbit.
Based on the available data, the classification criteria are not met.

D) respiratory or skin sensitization;

OECD guideline No 428 / eu b.42. Not sensitizing. Rat. Analogy.
Respiratory sensitization. No data.
Based on the available data, the classification criteria are not met.

E) germ cell mutagenicity;

Genotoxicity in vitro.
Microorganisms genetic mutations. Reverse mutation in bacteria. Negative (literature information)
Mutations of mammalian genes. OECD guideline No 476 / eu b.17. Negative.
Chromosomal Aberrations. According to Ishidate and Odashima (1977). Negative (literature information)

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Exchange of sister chromatids. Equivalent or similar to OECD 479. Negative (literature information).
Based on the available data, the classification criteria are not met.

F) carcinogenicity;

No substance-related neoplastic lesions were seen in the chronic toxicity study (literature data).
Based on the available data, the classification criteria are not met.

G) reproductive toxicity;

Adverse effects on sexual function and fertility / toxicity during development. OECD Guideline No 422. NOAEL (C); 1500mg / kg / d. Rat.
No effects on fertility or development were observed in a repeated dose toxicity study with the highest dose tested. Data on chemically related substances are in line with this study.
Based on the available data, the classification criteria are not met.

H) specific organ toxicity (STOT) - single exposure;

No relevant effects have been observed after a single exposure to potassium nitrate.
Based on the available data, the classification criteria are not met.

(I) specific organ toxicity (STOT) - repeated exposure;
OECD Guideline No 422. NOAEL (C): 1500mg / g body weight / d affected organs: None.
Based on the available data, the classification criteria are not met.

J) aspiration hazard;

Physico-chemical and toxicological data do not indicate a potential risk of aspiration.
Based on the available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

Name	Ecotoxicity			
	Type	Test	Kind	Value
Potassium nitrate	Fish	LC50	Poecilia reticulata	1378 mg/l (96h) [1]
		[1] freshwater fish (informative literature)		
	Aquatic invertebrates	EC50	Daphnia magna	490 mg/l (48h) [1]
		[1] crustaceans freshwater (informative literature)		
	Aquatic plants	EC50	different species algae	>1700 mg/L (10 d) [1]
		[1] (informative literature)		

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

12.2 Persistence and degradability.

No information is available regarding the biodegradability.
No information is available on the degradability. No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.

No information is available regarding the bioaccumulation.

12.4 Mobility in soil.

No information is available about the mobility in soil.
The product must not be allowed to go into sewers or waterways.
Prevent penetration into the ground.

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12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13: DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: TRANSPORT INFORMATION.

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/IATA for air transport.

Land: Transport by road: ADR, Transport by rail: RID.

Transport documentation: Consignment note and written instructions

Sea: Transport by ship: IMDG.

Transport documentation: Bill of lading

Air: Transport by plane: ICAO/IATA.

Transport document: Airway bill.

14.1 UN number.

UN No: UN1486

14.2 UN proper shipping name.

Description:

ADR: UN 1486, POTASSIUM NITRATE, 5.1, PG III, (E)

IMDG: UN 1486, POTASSIUM NITRATE, 5.1, PG III

ICAO/IATA: UN 1486, POTASSIUM NITRATE, 5.1, PG III

14.3 Transport hazard class(es).

Class(es): 5.1

14.4 Packing group.

Packing group: III

14.5 Environmental hazards.

Marine pollutant: No

14.6 Special precautions for user.

F-A,S-QLabels: 5.1



Hazard number: 50

ADR LQ: 5 kg

IMDG LQ: 5 kg

ICAO LQ: 10 kg

Provisions concerning carriage in bulk ADR:

VC1 Carriage in bulk in sheeted vehicles, sheeted containers or sheeted bulk containers is permitted.

VC2 Carriage in bulk in closed vehicles, closed containers or closed bulk containers is permitted.

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- AP6 If the vehicle or container is made of wood or other combustible material, an impermeable surfacing resistant to combustion or a coating of sodium silicate or similar substance shall be provided. Sheeting shall also be impermeable and non-combustible.
- AP7 Carriage in bulk shall only be as a full load.
- Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills):
Proceed in accordance with point 6.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.

The product is not transported in bulk.

SECTION 15: REGULATORY INFORMATION.

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

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): 5

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.
Available Product Exposure Scenario.

SECTION 16: OTHER INFORMATION.

Classification codes:

Ox. Sol. 3 : Oxidising solid, Category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards	On basis of test data
Health hazards	Calculation method
Environmental hazards	Calculation method

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Available Product Exposure Scenario.

Abbreviations and acronyms used:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
CEN: European Committee for Standardization.
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.
DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
EC50: Half maximal effective concentration.
PPE: Personal protection equipment.
IATA: International Air Transport Association.
ICAO: International Civil Aviation Organization.
IMDG: International Maritime Code for Dangerous Goods.
LC50: Lethal concentration, 50%.

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LD50: Lethal dose, 50%.
PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.

Key literature references and sources for data:

<http://eur-lex.europa.eu/homepage.html>

<http://echa.europa.eu/>

Regulation (EU) 2015/830.

Regulation (EC) No 1907/2006.

Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.

POTASSIUM NITRATE EXPOSURE SCENARIOS



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Annex to the extended safety data sheet (eSDS)

Generic exposure scenario 1

1. Title

Industrial use of potassium nitrate for formulation of preparations, intermediate use and end use in industrial environments.

Exposure scenarios that cover the following activities:

Sector of use [SU]: 3/10

Category of process [PROC]: 1/2/3/4/5/7/8a/8b/9/10/13/14/15/19/20/22/23/26

Category of emission to the environment [ERC]: 2/4/6a/7

Method of evaluation: Qualitative approach.

2. Operating conditions and risk management measures.

Because potassium nitrate is not classified in any of the categories of health or environmental risk, only generic risk management measures beyond the REACH chemical safety assessment, which are established within the Chemical industry by means of safety data sheets, although they are not necessarily required to control the risk. The management measures to control the risk derived from oxidizing properties are also presented below.

2.1 Exposure control of workers.

Frequency and duration of work	Forced Local Extraction	Respiratory / skin protection
Daily > 4h	No	No

- Physical form of the product: Crystals or granules.
- Volatility: Low.
- Quantities used: Not relevant for the assessment of risk to human health.
- Human factors not influenced by risk management: No.
- Other operating conditions given that impact on worker exposure: Indoor use.
- Technical conditions and measures at the process level (source) to prevent emission: Please refer to the description of the activity.
- Technical conditions and measures to control the dispersion of the source with respect to workers: No necessary specific technical measures or conditions are required.
- Organizational measures to prevent or limit releases, dispersion and exposure: All national occupational exposure limits must be respected.
- Conditions and measures related to personal protection, hygiene and health assessment: Containment as appropriate. Good level of general ventilation. Minimize the number of staff exposed. Minimization of the manual phases. Extraction of effective contaminant. Avoid contact with contaminated tools and objects. Regular cleaning of equipment and work area. Manage / supervise the place to verify that the risk management measures are used correctly and the working conditions are followed. Training of personnel in the knowledge about the chemical behavior of the substance and good practices. Good level of personal hygiene.
- Conditions and measures related to the hazards of physicochemical properties: General good practice in handling and storing hazardous chemicals. Do not eat, drink or smoke during use. Keep away from flammable, combustible, reducing agents, strong acids and empty pallets.

2.2 Control of exposure to the environment.

Unrealized.

3. Estimation of exposure and reference to its source.

Unrealized.

4. Valuation guide for downstream users.

Because potassium nitrate does not fall under any of the categories of health or environmental risk, only generic risk management measures beyond the REACH chemical safety assessment established within the chemical industry are recommended.

For hazards arising from physicochemical properties, downstream users can objectively assess their own risk and possible consequences of an incident following the methodology set out in Annex E-1 of the guidance document on chemical safety information and assessment requirements , Part E: Risk characterization (<http://guidance.echa.europa.eu/>).

POTASSIUM NITRATE EXPOSURE SCENARIOS



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Generic exposure scenario 2

1. Title

Professional use of potassium nitrate for the formulation of preparations and final use

Exposure scenarios that cover the following activities:

Sector of use [SU]: 22

Category of process [PROC]: 2/5/8^a/8b/9/10/11/13/16/19/26

Category of emission to the environment [ERC]: 8a/8b/8c/8d/8e/8f/9a/9b

Method of evaluation: Qualitative approach.

2. Operating conditions and risk management measures.

Because potassium nitrate is not classified in any of the categories of health or environmental risk, only generic risk management measures beyond the REACH chemical safety assessment, which are established within the Chemical industry by means of safety data sheets, although they are not necessarily required to control the risk. The management measures to control the risk derived from oxidizing properties are also presented below.

2.1 Exposure control of workers.

Frequency and duration of work	Forced Local Extraction	Respiratory / skin protection
Daily > 4h	No	No

- Physical form of the product: Crystals or granules.
- Volatility: Low.
- Quantities used: Not relevant for the assessment of risk to human health.
- Human factors not influenced by risk management: No.
- Other operating conditions given that impact on workers exposure: Use outdoors / indoors.
- Technical conditions and measures at the process level (source) to prevent emission: Please refer to the description of the activity.
- Technical conditions and measures to control the dispersion of the source with respect to workers: No necessary specific technical measures or conditions are required.
- Organizational measures to prevent or limit releases, dispersion and exposure: All national occupational exposure limits must be respected.
- Conditions and measures related to personal protection, hygiene and health assessment: Containment as appropriate. Good level of general ventilation. Minimize the number of staff exposed. Minimization of the manual phases. Extraction of effective contaminant. Avoid contact with contaminated tools and objects. Regular cleaning of equipment and work area. Manage / supervise the place to verify that the risk management measures are used correctly and the working conditions are followed. Training of personnel in the knowledge about the chemical behavior of the substance and good practices. Good level of personal hygiene.
- Conditions and measures related to the hazards of physicochemical properties: General good practice in handling and storing hazardous chemicals. Do not eat, drink or smoke during use. Keep away from flammable, combustible, reducing agents, strong acids and empty pallets.

2.2 Control of exposure to the environment.

Unrealized.

3. Estimation of exposure and reference to its source.

Unrealized.

4. Valuation guide for downstream users.

Because potassium nitrate does not fall under any of the categories of health or environmental risk, only generic risk management measures beyond the REACH chemical safety assessment established within the chemical industry are recommended.

For hazards arising from physicochemical properties, downstream users can objectively assess their own risk and possible consequences of an incident following the methodology set out in Annex E-1 of the guidance document on chemical safety information and assessment requirements , Part E: Risk characterization (<http://guidance.echa.europa.eu/>).

POTASSIUM NITRATE EXPOSURE SCENARIOS



Versión: 1

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Generic exposure scenario 3

1. Title

Final use of fertilizers and other products by consumers.

Exposure scenarios that cover the following activities:

Sector of use [SU]: 21

Category of process [PROC]: 0(S50200)/4/12/35/39

Category of emission to the environment [ERC]: 8a/8b/8d/8e/9a/9b

Method of evaluation: Qualitative approach.

2. Operating conditions and risk management measures.

2.1 Exposure control of workers.

Correct product labeling.

2.2 Control of exposure to the environment.

Unrealized.

3. Estimation of exposure and reference to its source.

Unrealized.

4. Valuation guide for downstream users.

Ensure correct labeling of products.