

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	: Substance
Trade name	: POTASSIUM NITRATE
Chemical name	: Potassium nitrate
EC No	: 231-818-8
CAS No	: 7757-79-1
REACH registration No	: 01-2119488224-35-0029
Product code	: PREX-002
Formula	: KNO ₃
Synonyms	: Saltpeter; Acidic Potassium Nitrate
Product group	: Inorganic salt

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

1.2.1. Relevant identified uses

Title	Use descriptors
Industrial uses: Formulation of preparations, Use as an intermediate, Specific end uses. (ES Ref.: ES1)	SU3, SU10, PC4, PC12, PC14, PC16, PC17, PC19, PC20, PC35, PC37, PC39, PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC19, PROC20, PROC22, PROC23, PROC26, ERC2, ERC4, ERC6a, ERC7
Professional use: Formulation of preparations, Specific end uses (ES Ref.: ES2)	SU22, PC4, PC12, PC16, PC17, PC37, PROC2, PROC5, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC16, PROC19, PROC26, ERC8a, ERC8b, ERC8c, ERC8d, ERC8e, ERC8f, ERC9a, ERC9b
Consumer use: Fertilizer & Other Products (ES Ref.: ES3)	SU21, PC4, PC12, PC35, PC39, ERC8a, ERC8b, ERC8d, ERC8e, ERC9a, ERC9b

Full text of use descriptors: see section 16

1.2.2. Uses advised against

Title	Use descriptors	Reason
Consumer use	SU21, PC0, PC11	

Full text of use descriptors: see section 16

1.3. Details of the supplier of the safety data sheet

PRAYON (O.R.2.) KEMAPCO
Rue Joseph Wauters, 144
B-4480 Engis - Belgique-Belgium
T +32 (0)4 273 92 11 - F +32 (0)4 273 96 35
Reachcustomer@prayon.be - www.prayon.be

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0870 600 6266 (UK only),	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	
United Kingdom	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XX Cardiff	0344 892 0111	
United Kingdom	National Poisons Information Service Edinburgh Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA Edinburgh	0344 892 0111	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241	
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0344 892 0111	

POTASSIUM NITRATE

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Oxidising Solids, Category 3 H272

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS03

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H272 - May intensify fire; oxidiser

Precautionary statements (CLP) :

P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking
P221 - Take any precaution to avoid mixing with Other chemicals, combustible materials

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : POTASSIUM NITRATE
CAS No : 7757-79-1
EC No : 231-818-8

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Potassium nitrate	(CAS No) 7757-79-1 (EC No) 231-818-8 (REACH-no) 012119488224-35-0029	> 97	Ox. Sol. 3, H272

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air. Assure fresh air breathing. If breathing is difficult, give oxygen. Call a physician immediately.

First-aid measures after skin contact : Wash immediately with plenty of soap and water. Remove contaminated clothing and shoes. Take off contaminated clothing and wash before reuse. Obtain medical attention if irritation persists.

First-aid measures after eye contact : In case of eye contact, remove contact lenses and immediately rinse with clean water for 20-30 minutes. Call a doctor.

First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Call a physician immediately.

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

Symptoms/injuries : Respiratory tract irritation. Eye irritation. Skin irritation. Can occur: gastrointestinal disturbance.

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

See Heading 4.1.

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SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : All extinguishing media can be used.

5.2. Special hazards arising from the substance or mixture

Fire hazard : On exposure to high temperature, may decompose, releasing toxic gases. Oxidising. Reacts with combustible materials and increases combustion even in the absence of air. Poisonous nitrous gasses may form in case of fire.

5.3. Advice for firefighters

Precautionary measures fire : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : Exercise caution when fighting any chemical fire. Avoid mechanical shock. Avoid high temperatures.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Provide adequate ventilation to minimize dust and/or vapour concentrations. Equip cleanup crew with proper protection. Personal protective equipment (see section (s) :8.2).

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers, soils and natural waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spill when it is dry. Sweep or shovel spills into appropriate container for disposal.

6.4. Reference to other sections

See section 8 and 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid dust production. Avoid any direct contact with the product. Packagings, even those that have been emptied, will retain product residue. Always obey safety warnings and handle empty packagings as if they were full. Keep away from sources of ignition. Both local exhaust and general room ventilation are usually required. Keep away from heat and direct sunlight.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Remove contaminated clothing and shoes.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place. Keep packaging closed when not in use. Keep away from combustible material. Keep away from naked flames/heat. Keep away from sources of ignition.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

POTASSIUM NITRATE (7757-79-1)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	20.8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	36.7 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	12.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	10.9 mg/m ³
Long-term - systemic effects, dermal	12.5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.45 mg/l
PNEC aqua (marine water)	0.045 mg/l
PNEC aqua (intermittent, freshwater)	4.5 mg/l
PNEC (STP)	

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POTASSIUM NITRATE (7757-79-1)	
PNEC sewage treatment plant	18 mg/l

8.2. Exposure controls

Appropriate engineering controls:

Good ventilation of the workplace required. Please refer to the annex (exposure scenarios).

Hand protection:

Use gloves resistant to chemical products corresponding to EN 374:3". Take advice to gloves' manufacturer ."

Skin and body protection:

Protective clothing (with elasticated cuffs and closed neck)

Respiratory protection:

Appropriate dust or mist respirator should be used if airborne particles are generated when handling this material (Type FFP2 in accordance with EN 140 or 149)

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Crystalline powder
Molecular mass	: 101 g/mol
Colour	: white.
Odour	: odourless.
Odour threshold	: Not applicable
pH	: 5 - 8
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 335 °C
Freezing point	: No data available
Boiling point	: > 300 °C
Flash point	: No data available
Auto-ignition temperature	: Not flammable
Decomposition temperature	: > 600 °C
Flammability (solid, gas)	: Not flammable
Vapour pressure	: Not applicable
Relative vapour density at 20 °C	: Not applicable
Relative density	: No data available
Density	: 2.1 g/cm ³
Solubility	: Water: > 300 g/l Material highly soluble in water
Log Pow	: Not applicable
Log Kow	: Not applicable
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: Not applicable
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing material according to EC criteria.
Explosive limits	: Not explosive

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Under normal circumstances (temperature and pressure) the product is stable.

10.2. Chemical stability

Stable under normal conditions (Handling and storage).

10.3. Possibility of hazardous reactions

Reacts violently with : Acids. Combustibles. Metal powder. Reducing agents.

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10.4. Conditions to avoid

Contact with combustible material may cause fire.

10.5. Incompatible materials

Flammable materials. combustibles. Reducing agent.

10.6. Hazardous decomposition products

On exposure to high temperature, may decompose, releasing toxic gases. (+/- 400 °C).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

POTASSIUM NITRATE (7757-79-1)	
LD50 oral rat	> 2000 mg/kg (OECD 425)
LD50 dermal rat	> 5000 mg/kg (OECD 402)
LC50 inhalation rat (mg/l)	> 527 mg/m ³ (OECD 403)

Potassium nitrate (7757-79-1)	
LD50 oral rat	> 2000 mg/kg (OECD 425)
LD50 dermal rat	> 5000 mg/kg (OECD 402)
LC50 inhalation rat (mg/l)	> 527 mg/m ³ (OECD 403)

Skin corrosion/irritation : Not irritating. rabbit. OECD 404
pH: 5 - 8

Serious eye damage/irritation : Not irritating. rabbit. OECD 405
pH: 5 - 8

Respiratory or skin sensitisation : Did not cause sensitisation. mouse, OECD 429

Germ cell mutagenicity : Negative /OECD 471. Negative/OECD 476

Carcinogenicity : No carcinogenic effect

Reproductive toxicity : NOAEL: > = 1500 mg/kg bw/day(rat, oral, 28 days, OECD 422)

STOT-single exposure : Not classified

STOT-repeated exposure : NOAEL: > = 1500 mg/kg bw/day(rat, OECD 422)

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

POTASSIUM NITRATE (7757-79-1)	
LC50 fish 1	1378 mg/l (96h - Poecilia reticulata, OECD 203)
EC50 Daphnia 1	490 mg/l (48h - Daphnia)
EC50 other aquatic organisms 1	> 1000 mg/l (3h - ACTIVATED SLUDGE,OECD 209)
ErC50 (algae)	> 1700 mg/l (10 d - Benthic diatoms)
NOEC (additional information)	ACTIVATED SLUDGE 180 mg/l OECD 209

Potassium nitrate (7757-79-1)	
LC50 fish 1	1378 mg/l (96h - Poecilia reticulata, OECD 203)
EC50 Daphnia 1	490 mg/l (48h - Daphnia)
EC50 other aquatic organisms 1	> 1000 mg/l (3h - ACTIVATED SLUDGE,OECD 209)
ErC50 (algae)	> 1700 mg/l (10 d - Benthic diatoms)
NOEC (additional information)	ACTIVATED SLUDGE 180 mg/l OECD 209

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

POTASSIUM NITRATE (7757-79-1)	
Log Pow	Not applicable
Log Kow	Not applicable
Bioaccumulative potential	small.

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Potassium nitrate (7757-79-1)	
Log Pow	Not applicable
Log Kow	Not applicable
Bioaccumulative potential	small.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

POTASSIUM NITRATE (7757-79-1)	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
Component	
Potassium nitrate (7757-79-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects : Nitrate may cause an eutrophication of natural water.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container at hazardous or special waste collection point.

Ecology - waste materials : See the european waste catalogue.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1486
UN-No. (IMDG) : 1486
UN-No. (IATA) : 1486
UN-No. (ADN) : 1486
UN-No. (RID) : 1486

14.2. UN proper shipping name

Proper Shipping Name (ADR) : POTASSIUM NITRATE
Proper Shipping Name (IMDG) : POTASSIUM NITRATE
Proper Shipping Name (IATA) : POTASSIUM NITRATE
Proper Shipping Name (ADN) : POTASSIUM NITRATE
Proper Shipping Name (RID) : POTASSIUM NITRATE
Transport document description (ADR) : UN 1486 POTASSIUM NITRATE, 5.1, III, (E)
Transport document description (IMDG) : UN 1486 POTASSIUM NITRATE, 5.1, III
Transport document description (IATA) : UN 1486 POTASSIUM NITRATE, 5.1, III
Transport document description (ADN) : UN 1486 POTASSIUM NITRATE, 5.1, III
Transport document description (RID) : UN 1486 POTASSIUM NITRATE, 5.1, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 5.1
Danger labels (ADR) : 5.1



IMDG

Transport hazard class(es) (IMDG) : 5.1
Danger labels (IMDG) : 5.1

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IATA

Transport hazard class(es) (IATA) : 5.1

Hazard labels (IATA) : 5.1



ADN

Transport hazard class(es) (ADN) : 5.1

Danger labels (ADN) : 5.1



RID

Transport hazard class(es) (RID) : 5.1

Danger labels (RID) : 5.1



14.4. Packing group

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : III

Packing group (ADN) : III

Packing group (RID) : III

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : O2

Excepted quantities (ADR) : E1

Hazard identification number (Kemler No.) : 50

Orange plates :



Tunnel restriction code (ADR) : E

- Transport by sea

MFAG-No : 140

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- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

POTASSIUM NITRATE is not on the REACH Candidate List

POTASSIUM NITRATE is not on the REACH Annex XIV List

Other information, restriction and prohibition regulations : REGULATION (EU) No 98/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 January 2013 on the marketing and use of explosives precursors - The substance is listed.

15.1.2. National regulations

SUBSTANCE LISTED IN THE ANNEX I OF DIRECTIVE 2003/105/CE AMENDING DIRECTIVE 96/82/CE (CONTROL OF MAJOR - ACCIDENT HAZARDS INVOLVING DANGEROUS SUBSTANCES)

15.2. Chemical safety assessment

A chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

	ADN: European Agreement concerning international carriage of Dangerous goods by Inland waterways ADR: European Agreement concerning international carriage of Dangerous goods by Road AF : Assessment factor BCF : Bioconcentration factor Bw: Body weight CAS: Chemical Abstracts Service CLP : Classification, labelling, packaging CSR: Chemical Safety Report DMEL : Derived maximum effect level DNEL: Derivative No effect Level EC: European Community ELV : Emission limit values EN: European Norm EUH: European Hazard Statement EWC : European Waste catalogue IATA: International Air Transport Association ICAO: International Civil Aviation Organization IMDG: International Maritime Dangerous Goods LC50: Median lethal concentration LD50 : Median lethal dose NOAEL : No-observed-adverse-effect-level NOEC : No observed effect concentration NOEL : No observed effect level OEL : Operator exposure level PBT: Persistent, bioaccumulative, Toxic PEC : Predicted effect level PNEC: Predicted No effect Concentration REACH : Registration, evaluation and autorisation of chemicals RID: Regulations concerning the international carriage of dangerous goods by rail STEL: Short Term Exposure Limit TWA : Time weighted average vPvB: Very persistent, very bioaccumulative
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Data sources : Reach dossier.

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Training advice : None.

Full text of H- and EUH-statements:

Ox. Sol. 3	Oxidising Solids, Category 3
H272	May intensify fire; oxidiser
ERC2	Formulation of preparations
ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC6a	Industrial use resulting in manufacture of another substance (use of intermediates)
ERC7	Industrial use of substances in closed systems
ERC8a	Wide dispersive indoor use of processing aids in open systems
ERC8b	Wide dispersive indoor use of reactive substances in open systems
ERC8c	Wide dispersive indoor use resulting in inclusion into or onto a matrix
ERC8d	Wide dispersive outdoor use of processing aids in open systems
ERC8e	Wide dispersive outdoor use of reactive substances in open systems
ERC8f	Wide dispersive outdoor use resulting in inclusion into or onto a matrix
ERC9a	Wide dispersive indoor use of substances in closed systems
ERC9b	Wide dispersive outdoor use of substances in closed systems
PC0	ARTICLES, PYROTECHNIC
PC11	Explosives
PC12	Fertilizers
PC14	Metal surface treatment products, including galvanic and electroplating products
PC16	Heat Transfer Fluids
PC17	Hydraulic Fluids
PC19	Intermediate
PC20	Products such as ph-regulators, flocculants, precipitants, neutralization agents
PC35	Washing and cleaning products (including solvent based products)
PC37	Water treatment chemicals
PC39	Cosmetics, personal care products
PC4	Anti-Freeze and De-icing products
PROC1	Use in closed process, no likelihood of exposure
PROC10	Roller application or brushing
PROC11	Non industrial spraying
PROC13	Treatment of articles by dipping and pouring
PROC14	Production of preparations or articles by tableting, compression, extrusion, pelletisation
PROC15	Use as laboratory reagent
PROC16	Using material as fuel sources, limited exposure to unburned product to be expected
PROC19	Hand-mixing with intimate contact and only PPE available
PROC2	Use in closed, continuous process with occasional controlled exposure
PROC20	Heat and pressure transfer fluids in dispersive use but closed systems
PROC22	Potentially closed processing operations with minerals/metals at elevated temperature Industrial setting
PROC23	Open processing and transfer operations with minerals/metals at elevated temperature
PROC26	Handling of solid inorganic substances at ambient temperature
PROC3	Use in closed batch process (synthesis or formulation)
PROC4	Use in batch and other process (synthesis) where opportunity for exposure arises
PROC5	Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)
PROC7	Industrial spraying
PROC8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
PROC8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
SU10	Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
SU21	Consumer uses: Private households (= general public = consumers)
SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU3	Industrial uses: Uses of substances as such or in preparations* at industrial sites

SDS EU (REACH Annex II)

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. DISCLAIMER OF LIABILITY The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

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Annex to the safety data sheet

Product exposure scenario(s)

ES Type	ES title
Worker	Industrial uses: Formulation of preparations, Use as an intermediate, Specific end uses.
Worker	Professional use: Formulation of preparations, Specific end uses
Consumer	Consumer use: Fertilizer & Other Products

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1. Exposure scenario ES1

Industrial uses: Formulation of preparations, Use as an intermediate, Specific end uses.

ES Ref.: ES1
ES Type: Worker
Version: 3.0
Revision date: 24/04/2017

Association ref code: ES2
Date of issue: 03/02/2015

Use descriptors	SU3, SU10 PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC19, PROC20, PROC22, PROC23, PROC26 PC4, PC12, PC14, PC16, PC17, PC19, PC20, PC35, PC37, PC39 ERC2, ERC4, ERC6a, ERC7
Processes, tasks, activities covered	Industrial use
Assessment method	The substance is not classified for human health hazards or for environment effects and it is not PBT or vPvB so that no exposure assessment or risk characterisation is required. For tasks where the intervention of workers is required, the substance must be handled in accordance with good industrial hygiene and safety procedures. Oxidising properties ---) Qualitative approach used to conclude safe use

2. Operational conditions and risk management measures

2.1 Contributing scenario controlling worker exposure (PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC19, PROC20, PROC22, PROC23, PROC26)

PROC1	Use in closed process, no likelihood of exposure
PROC2	Use in closed, continuous process with occasional controlled exposure
PROC3	Use in closed batch process (synthesis or formulation)
PROC4	Use in batch and other process (synthesis) where opportunity for exposure arises
PROC5	Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)
PROC7	Industrial spraying
PROC8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
PROC8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC10	Roller application or brushing
PROC13	Treatment of articles by dipping and pouring
PROC14	Production of preparations or articles by tableting, compression, extrusion, pelletisation
PROC15	Use as laboratory reagent
PROC19	Hand-mixing with intimate contact and only PPE available
PROC20	Heat and pressure transfer fluids in dispersive use but closed systems
PROC22	Potentially closed processing operations with minerals/metals at elevated temperature Industrial setting
PROC23	Open processing and transfer operations with minerals/metals at elevated temperature
PROC26	Handling of solid inorganic substances at ambient temperature

Product characteristics

Physical form of product	Solid, Liquid
Concentration of substance in product	> 25 %
Dustiness	Solid, low dustiness

Operational conditions

Frequency and duration of use	> 4 h/day
Other given operational conditions affecting workers exposure	indoor,outdoor

Risk Management Measures

Technical conditions and measures to control dispersion from source towards the worker	Containment as appropriate Good standard of general ventilation
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Other risk management measures:

Oxidizer	Handle in accordance with good industrial hygiene and safety practice. Keep away from ignition sources. Do not eat, drink or smoke when using this product. Keep away from combustible material, reducing agents, strong bases
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2.2 Contributing scenario controlling environmental exposure (ERC2, ERC4, ERC6a, ERC7)

ERC2	Formulation of preparations
ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC6a	Industrial use resulting in manufacture of another substance (use of intermediates)
ERC7	Industrial use of substances in closed systems

Product characteristics

Physical form of product	Liquid, Solid
Concentration of substance in product	> 25 %
Dustiness	Solid, low dustiness

Operational conditions

No additional information

Risk Management Measures

No additional information

3. Exposure estimation and reference to its source

3.1. Health

Information for contributing exposure scenario	
2.1	Qualitative approach used to conclude safe use

3.2. Environment

Information for contributing exposure scenario	
2.2	As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

4.1. Health

Guidance - Health	Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels
Website	http://guidance.echa.europa.eu/

4.2. Environment

Additional good practice advice beyond the REACH CSA

Additional good practice advice	Minimise number of staff exposed. Segregation of the emitting process. Effective contaminant extraction. Minimisation of manual phases. Avoid contact with contaminated tools and objects. Regular cleaning of equipment and work area. Supervision in place to check that the RMMs in place are being used correctly and OCs followed. Training staff on good practice. Good standard of personal hygiene
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POTASSIUM NITRATE

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

1. Exposure scenario ES2

Professional use: Formulation of preparations, Specific end uses

ES Ref.: ES2	Association ref code: ES2
ES Type: Worker	Date of issue: 03/02/2015
Version: 3.0	
Revision date: 24/04/2017	

Use descriptors	SU22 PROC2, PROC5, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC16, PROC19, PROC26 PC4, PC12, PC16, PC17, PC37 ERC8a, ERC8b, ERC8c, ERC8d, ERC8e, ERC8f, ERC9a, ERC9b
Processes, tasks, activities covered	Industrial use
Assessment method	The substance is not classified for human health hazards or for environment effects and it is not PBT or vPvB so that no exposure assessment or risk characterisation is required. For tasks where the intervention of workers is required, the substance must be handled in accordance with good industrial hygiene and safety procedures. Oxidising properties ---) Qualitative approach used to conclude safe use

2. Operational conditions and risk management measures

2.1 Contributing scenario controlling worker exposure (PROC2, PROC5, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC16, PROC19, PROC26)

PROC2	Use in closed, continuous process with occasional controlled exposure
PROC5	Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)
PROC8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
PROC8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC10	Roller application or brushing
PROC11	Non industrial spraying
PROC13	Treatment of articles by dipping and pouring
PROC16	Using material as fuel sources, limited exposure to unburned product to be expected
PROC19	Hand-mixing with intimate contact and only PPE available
PROC26	Handling of solid inorganic substances at ambient temperature

Product characteristics

Physical form of product	Solid, Liquid
Concentration of substance in product	> 25 %
Dustiness	Solid, low dustiness

Operational conditions

Frequency and duration of use	> 4 h/day
Other given operational conditions affecting workers exposure	indoor,outdoor

Risk Management Measures

Technical conditions and measures to control dispersion from source towards the worker	Good standard of general ventilation
	Containment as appropriate

Other risk management measures:

Oxidizer	Handle in accordance with good industrial hygiene and safety practice. Keep away from ignition sources. Do not eat, drink or smoke when using this product. Keep away from combustible material, reducing agents, strong bases
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2.2 Contributing scenario controlling environmental exposure (ERC8a, ERC8b, ERC8c, ERC8d, ERC8e, ERC8f, ERC9a, ERC9b)

ERC8a	Wide dispersive indoor use of processing aids in open systems
ERC8b	Wide dispersive indoor use of reactive substances in open systems
ERC8c	Wide dispersive indoor use resulting in inclusion into or onto a matrix
ERC8d	Wide dispersive outdoor use of processing aids in open systems
ERC8e	Wide dispersive outdoor use of reactive substances in open systems
ERC8f	Wide dispersive outdoor use resulting in inclusion into or onto a matrix

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ERC9a	Wide dispersive indoor use of substances in closed systems
ERC9b	Wide dispersive outdoor use of substances in closed systems

Product characteristics

Physical form of product	Liquid, Solid
Concentration of substance in product	> 25 %
Dustiness	Solid, low dustiness

Operational conditions

No additional information

Risk Management Measures

No additional information

3. Exposure estimation and reference to its source

3.1. Health

Information for contributing exposure scenario	
2.1	Qualitative approach used to conclude safe use

3.2. Environment

Information for contributing exposure scenario	
2.2	As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

4.1. Health

Guidance - Health	Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels
Website	http://guidance.echa.europa.eu/

4.2. Environment

Additional good practice advice beyond the REACH CSA

Additional good practice advice	Minimise number of staff exposed. Segregation of the emitting process. Effective contaminant extraction. Minimisation of manual phases. Avoid contact with contaminated tools and objects. Regular cleaning of equipment and work area. Supervision in place to check that the RMMs in place are being used correctly and OCs followed. Training staff on good practice. Good standard of personal hygiene
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POTASSIUM NITRATE

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

1. Exposure scenario ES3

Consumer use: Fertilizer & Other Products

ES Ref.: ES3	Association ref code: ES3
ES Type: Consumer	Date of issue: 03/02/2015
Version: 3.0	
Revision date: 24/04/2017	

Use descriptors	SU21 PC4, PC12, PC35, PC39 ERC8a, ERC8b, ERC8d, ERC8e, ERC9a, ERC9b
Processes, tasks, activities covered	Consumer use
Assessment method	The substance is not classified for human health hazards or for environment effects and it is not PBT or vPvB so that no exposure assessment or risk characterisation is required. For tasks where the intervention of workers is required, the substance must be handled in accordance with good industrial hygiene and safety procedures. Oxidising properties ---) Qualitative approach used to conclude safe use

2. Operational conditions and risk management measures

2.1 Contributing scenario consumer end-use (PC4, PC12, PC35, PC39)

PC4	Anti-Freeze and De-icing products
PC12	Fertilizers
PC35	Washing and cleaning products (including solvent based products)
PC39	Cosmetics, personal care products

Product characteristics

Physical form of product	Solid, Liquid
Dustiness	Solid, low dustiness

Operational conditions

Other given operational conditions affecting consumers exposure	outdoor, indoor
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Risk Management Measures

Conditions and measures related to information and behavioural advice to consumers	Observe the label precautions
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2.2 Contributing scenario controlling environmental exposure (ERC8a, ERC8b, ERC8d, ERC8e, ERC9a, ERC9b)

ERC8a	Wide dispersive indoor use of processing aids in open systems
ERC8b	Wide dispersive indoor use of reactive substances in open systems
ERC8d	Wide dispersive outdoor use of processing aids in open systems
ERC8e	Wide dispersive outdoor use of reactive substances in open systems
ERC9a	Wide dispersive indoor use of substances in closed systems
ERC9b	Wide dispersive outdoor use of substances in closed systems

Product characteristics

Physical form of product	Liquid, Solid
Dustiness	Solid, low dustiness

Operational conditions

No additional information

Risk Management Measures

No additional information

3. Exposure estimation and reference to its source

3.1. Health

Information for contributing exposure scenario	
2.1	Qualitative approach used to conclude safe use, PC 39 : In accordance to the Article 14 (5b) of the REACH Regulation (EC) No 1907/2006, exposure estimation and risk characterisation for human health does not need to be performed for end uses in cosmetic products within the scope of Directive 76/768/EEC

3.2. Environment

Information for contributing exposure scenario	
2.2	As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed

POTASSIUM NITRATE

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

4.1. Health

4.2. Environment