Ultrasol® K Plus

Safety Data Sheet

According to Regulation (EU) 2015/830, 2020/878 (REACH Annex II)
Product Reference code:001b_EUR
Issue date: 07/08/2024 Revision date: 07/08/2024 Supersedes version of: 03/02/2022 Version: 10.2

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

1.1. Product identifier

Product form	:	Substance
Trade name	:	Ultrasol® K Plus
Chemical name	:	Potassium nitrate
EC-No.	:	231-818-8
CAS-No.	:	7757-79-1
Product code	:	001b_EUR
Formula	:	KNO3

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

Relevant identified uses

Main use category	:	Formulation of preparations,Industrial use,Fertilizer,Agriculture, forestry, fishery
Industrial/Professional use spec	:	Formulation of preparations Fertilizers

Uses advised against

Restrictions on use	:	Food/feedstuff additives, Water treatment chemicals

1.3. Details of the supplier of the safety data sheet

Supplier
SOCIEDAD QUIMICA Y MINERA- MAROC sari.au
Entree Quest, Niveau 1, Anfa Place, Boulevard de la Comic he, Ain Diab
Casablanca, Maroc
product_safety@sqm.com; sqmmaroc@sqm.com

1.4. Emergency telephone number

Emergency number	:	For Chemical Emergency Call CHEMTREC 24hr/day 7days/week: 1-800-424-9300 (collect calls accepted); +44 20 3885 0382 (EMEA)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Ox. Sol. 3 H272
Full text of hazard classes, H- and EUH-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, 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 use any suitable mean for extinguishing surrounding fire. Spray water for small fires. For large fires flood with abundant water. to extinguish.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Potassium nitrate	CAS-No.: 7757-79-1 EC-No.: 231-818-8	Ox. Sol. 3, H272

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell. Never give anything by mouth to an unconscious person.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact : Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Drink plenty of water. Do not induce vomiting. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation : Dust of the product, if present, may cause respiratory irritation after excessive inhalation exposure. In the event of thermal decomposition : Symptoms may be delayed.
Symptoms/effects after skin contact : May cause slight irritation to the skin.
Symptoms/effects after eye contact : May cause slight irritation.
Symptoms/effects after ingestion : On ingestion in large quantities: Irritation of the gastric/intestinal mucosa.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : use any suitable mean for extinguishing surrounding fire. Spray water for small fires. For large fires flood with abundant water.

Unsuitable extinguishing media : None.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable. May intensify fire; oxidiser.

Hazardous decomposition products in case of fire : Toxic fumes may be released. Corrosive vapours.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ventilate area. Avoid dust formation.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Do not allow to enter drains or water courses.

6.3. Methods and material for containment and cleaning up

For containment : Use appropriate container to avoid environmental contamination.

Methods for cleaning up : Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Do not absorb with saw-dust or any other combustible absorbent material.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13 : Disposal considerations" ".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wear personal protective equipment. Avoid dust formation. Ensure adequate ventilation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep container tightly closed. Store in a dry place. Keep in original containers.

Incompatible products : Flammable or combustible materials. Reducing agents. strong acids.

7.3. Specific end use(s)

For further information refer to section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL and PNEC

Potassium nitrate (7757-79-1)	
PNEC (Water)	
PNEC aqua (freshwater)	20 mg/l
PNEC aqua (marine water)	20.1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	98.2 mg/kg dwt
PNEC sediment (marine water)	97.5 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	21.4 mg/l

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station. Effective contaminant extraction. Training staff on good practice.

Personal protection equipment

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:
Safety glasses

Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective gloves

Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls

Environmental exposure controls:
Do not allow to enter drains or water courses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Colour	:	White.
Appearance	:	Crystals.
Odour	:	odourless.
Odour threshold	:	Not available
Melting point	:	333 – 337 °C

Freezing point	:	Not applicable
Boiling point	:	Not applicable
Flammability	:	Non flammable.
Explosive properties	:	Not explosive.
Oxidising properties	:	Oxidizing. Test O.1 Test for oxidizing solids.
Lower explosion limit	:	Not applicable
Upper explosion limit	:	Not applicable
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	> 600 °C
pH	:	8 – 11 Aqueous solution: 5%
pH solution	:	Not available
Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	Not applicable
Solubility	:	Water: > 100 g/l
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not applicable
Vapour pressure at 50°C	:	Not available
Density	:	2.1 at 20 °C
Relative density	:	Not applicable
Relative vapour density at 20°C	:	Not applicable
Particle size	:	Not available

9.2. Other information

Other safety characteristics

Additional information : None known

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

flammable materials. Combustible materials. strong acids. Reducing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. thermal decomposition may produce : Nitrogen oxides. Potassium oxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

Potassium nitrate (7757-79-1)	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 425 method)
LD50 dermal rat	> 5000 mg/kg bodyweight (OECD 402 method)
LC50 Inhalation - Rat	> 0.527 mg/l/4h (OECD 403 method)

Skin corrosion/irritation : Not classified. (OECD 404 method). (OECD 439 method)
pH: 8 – 11 Aqueous solution: 5%

Serious eye damage/irritation : Not classified. (OECD 405 method). (OECD 437 method)
pH: 8 – 11 Aqueous solution: 5%

Respiratory or skin sensitisation : Not classified. (OECD 429 method)

Germ cell mutagenicity : Mutagenicity tests are negative. AMES test. Chromosomal aberration test. (OECD 476 method)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity : Not classified. (OECD 422 method)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

Potassium nitrate (7757-79-1)	
NOAEL (subacute, oral, animal/male, 28 days)	1500 mg/kg bodyweight (OECD 422 method)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

Potassium nitrate (7757-79-1)	
Viscosity, kinematic	Not applicable

11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short–term (acute) : Not classified (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long–term (chronic) : Not classified (Based on available data, the classification criteria are not met)

Potassium nitrate (7757-79-1)	
LC50 - Fish [1]	346 mg/l (Published data)
EC50 - Crustacea [1]	340 mg/l (Published data)
EC50 72h - Algae [1]	> 71 mg/l (Published data)

12.2. Persistence and degradability

Potassium nitrate (7757-79-1)	
Persistence and degradability	Rapidly degradable.

12.3. Bioaccumulative potential

Potassium nitrate (7757-79-1)	
Bioaccumulative potential	Low bioaccumulation potential.

12.4. Mobility in soil

Potassium nitrate (7757-79-1)	
Ecology - soil	Product adsorbs little onto the soil.

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

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : Based on available data, the classification criteria are not met.

12.7. Other adverse effects

Other adverse effects : May cause eutrophication at very low concentration.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations. Dispose in a safe manner in accordance with local/national regulations. Do not allow to enter drains or water courses.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Do not allow to enter drains or water courses. Do not allow material to contaminate surface water system.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 1486	UN 1486	UN 1486	UN 1486	UN 1486
14.2. UN proper shipping name				
POTASSIUM NITRATE	POTASSIUM NITRATE	Potassium nitrate	POTASSIUM NITRATE	POTASSIUM NITRATE
14.3. Transport hazard class(es)				
5.1	5.1	5.1	5.1	5.1
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

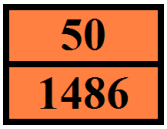
14.6. Special precautions for user

Special transport precautions : None

Overland transport

Classification code (ADR) : O2

Orange plates :



Transport by sea

Special provisions (IMDG) : 964, 967

IBC special provisions (IMDG) : B3

Air transport

Special provisions (IATA) : A803

Inland waterway transport

Classification code (ADN) : O2

Rail transport

No data available

14.7. Maritime transport in bulk according to IMO instruments

Bulk cargo shipping name : IMSBC Code: Group B, UN 1486, Class 5.1, POTASSIUM NITRATE

Cargo is considered harmful to the marine environment : No

Material hazardous only in bulk : No

Cargo group : Group B

SECTION 15: Regulatory information

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

EU-Regulations

Other information, restriction and prohibition regulations : Subject to Regulation (EU) 2019/1009. The product complies with applicable contaminant limits set out in Annex I to Regulation (EU) 2019/1009 of the European Parliament and of the Council of 5 June 2019.

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

Council Regulation (EC) for the control of dual-use items

Not listed on the COUNCIL REGULATION (EC) of dual-use items.

Seveso Directive (Disaster Risk Reduction)

Seveso Additional information : Potassium nitrate (5 000 / 10 000)
This applies to those composite potassium-nitrate based fertilisers (in prilled/granular form) which have the same hazardous properties as pure potassium nitrate.

Explosives Precursors Regulation (EU 2019/1148)

Contains substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)
ANNEX II REPORTABLE EXPLOSIVES PRECURSORS
List of substances on their own or in mixtures or in substances for which suspicious transactions and significant disappearances and thefts are to be reported within 24 hours.

Name	CAS-No.	Combined Nomenclature code (CN)	Combined Nomenclature code for mixture without constituents which would determine classification under another CN code
Potassium nitrate	7757-79-1	2834 21 00	ex 3824 99 96

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on the Canadian DSL (Domestic Substances List)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on Turkish inventory of chemical

15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes		
Section	**Changed item**	**Comments**
8.1.4	DNEL and PNEC	**Modified**
11.2.	Endocrine disrupting properties	**Amendment**
12.1	Ecotoxicological information	**Modified**
12.6	Endocrine disrupting properties	**Amendment**

Full text of H- and EUH-statements:	
Ox. Sol. 3	Oxidising Solids, Category 3
H272	May intensify fire; oxidiser.

The classification complies with : ATP 8

Safety Data Sheet (SDS), EU

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.