

Safety Data Sheet

In accordance with Commission Regulation (EU) No 2015/830




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Revision: 4

Magnesium Nitrate Solution

SECTION 1		Identification of the substance/mixture and of the company/undertaking
1.1	Product identifier	
	Trade name	Fertibersol (Mg - L)
	Synonyms	Magnesium nitrate solution 7 % N 9,5 MgO
	Code	FDS-025
	Chemical name	-
	Chemical formula	-
	Index Number	Not applicable
	EINECS Number	Not applicable
	CAS Number	Not applicable.
	Registration Number	It is a mixture and therefore has no registration number.
1.2	Relevant identified uses of the substance or mixture and uses advised against	
	Application of the substance / the mixture	Fertiliser Mixture manufacture
	Uses advised against	Others than those indicated.
1.3	Details of the supplier of the safety data sheet	Fertiberia, S.A. 27, Agustín de Foxa Street pta. 11 28036 Madrid Madrid (Spain) +34 91.586.62.00; fdsinfo@grupofertiberia.com
1.4	Emergency telephone number	Aviles Factory: +34 985.57.78.50 (Only available during office hours; Monday-Friday; 09:00-18:00)
SECTION 2		Hazards identification
2.1	Classification of the substance or mixture according Regulation (EC) n° 1272/2008 (CLP)	Eye Irrit. 2 H319 Causes serious eye irritation.
2.2	Label elements	
	Hazard pictograms	
	Signal word	Warning

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	Hazard-determining components of labelling	Not applicable.
	Hazard statements	H319 Causes serious eye irritation.
	Precautionary statements	P102 Keep out of reach of children. P270 Do not eat, drink or smoke when using this product. P264 Wash thoroughly after handling. P280 Wear eye protection / face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention.
	Additional information	Acquisition, possession or use by private individuals is subject to notification.
	Supplemental information on the label	Not applicable.
	Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	Not applicable.
	Special packaging requirements	Not applicable.
	Containers to be fitted with child-resistant fastenings	Not applicable.
	Tactile hazard warning	Not applicable.
2.3	Other hazards	
	Other hazards which do not result in classification	None known.
	Results of the PBT and vPvB assessment	Not applicable.
SECTION 3	Composition/information on ingredients	
3.1	Substances	

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	Not applicable					
3.2	Mixtures					
	Name	CE number	CAS number	Registration number	%(P/P)	Classification Regulation CE N° 1272/2008
	Magnesium nitrate	233-826-7	10377-60-3	-	40-80%	Ox. Sol. 2 H272
	Calcium nitrate	233-332-1	10124-37-5	-	>=1-<3%	Ox. Sol. 3 H272; Acute Tox. 4 H302; Eye Dam. 1 H318
	Nitric acid	231-714-2	7697-37-2	-	0-0.15%	Ox. Liq. 3, H272; Acute Tox. 3, H331; Met. Corr.1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318; EUH071 Ox. Liq. 3; H272: C >= 65 % Skin Corr. 1A; H314: C >= 20 % Skin Corr. 1B; H314: 5 % <= C < 20 %
	Additional indications	For the wording of the listed hazard phrases refer to section 16.				
SECTION 4 First aid measures						
4.1	Description of first aid measures					
	General information	Provide medical assistance to those affected. People who dispense first aid are advised to wear personal protective equipment. There may be delayed effects on exposure.				
	Inhalation	Move patient to fresh air and keep at rest in a position comfortable for breathing. Monitor for respiratory distress. If coughing or difficulty breathing, assess for airway irritation, bronchitis or pneumonitis. If able, administer supplemental oxygen with assisted ventilation as needed. Administer artificial respiration if the patient is not breathing.				
	Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.				
	Skin contact	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.				
	Eye contact	Immediately remove contact lenses and flush eyes with plenty of lukewarm water for at least 15 minutes. If irritation, pain, swelling, excessive tearing or sensitivity to light persists, the patient should be seen at a health centre and referral to an ophthalmologist should be considered.				
4.2	Most important symptoms and effects, both acute and delayed					

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	Eye contact	Redness. Pain. Severe deep burns.
	Inhalation	No known significant effects or critical hazards.
	Skin contact	Redness, burn, pain, blistering.
	Ingestion	Irritation, pain and/or burning sensation.
4.3	Indication of any immediate medical attention and special treatment needed	
	No action involving personal risk or without adequate training should be taken. Avoid direct mouth-to-mouth resuscitation, as it can be dangerous for the person providing the help. Use other methods for resuscitation, preferably oxygen or compressed air equipment. Treat according to the following indications:	
	Notes to physician	Treat symptomatically.
	Specific treatments	There is not an specific treatment.

SECTION 5	Firefighting measures	
5.1	Extinguishing media	
	The product is not flammable.	
	Suitable extinguishing agents	Water spray, foam, dry powder or carbon dioxide.
	Unsuitable extinguishing agents for safety reasons	None.
5.2	Special hazards arising from the substance or mixture	
	Containers may explode in case of fire: use water spray to cool containers without opening them.	
	Hazardous thermal decomposition products	NO _x
5.3	Advice for firefighters	
	Open warehouse doors and windows for maximum ventilation. Fire-fighting personnel should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face mask operating in positive pressure mode. Clothing for fire-fighting personnel (including helmets, protective boots) should conform to European standard EN 469 and gloves to EN 659. It should provide a basic level of protection for chemical incidents and should be fire resistant. The facility shall have sufficient protective equipment available to deal with fires.	
SECTION 6	Accidental release measures	
6.1	Personal precautions, protective equipment and emergency procedures	
	Wear protective clothing.	

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	For non-emergency personnel	
	<p>Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. In case of non-flammable spills and leaks, wear vapor protective clothing. Stop leak if you can do so without risk. Keep unnecessary persons away, isolate the danger area and prevent entry. Eliminate sources of combustion.</p> <p>Keep upwind, out of low areas and ventilate confined spaces before entering. Assess the affected area to determine if evacuation is necessary. If it is necessary to evacuate the danger zone, you should follow the advice of an expert. If sheltering in place, tape windows and doors, close outside air intakes (attic fans, etc.) and place a damp towel or cloth over your face (if necessary).</p>	
	For emergency responders	
	<p>With proper training, self-contained breathing apparatus (SCBA) and protective clothing for structural firefighters used in conjunction with water spray will provide limited protection in outdoor emissions for short-term exposure.</p>	
6.2	Environmental precautions	
	<p>In case of accidental spills and leaks avoid dispersal of spilled material, runoff and contact with soil, watercourses (surface and groundwater), drains and sewers. Inform the competent authorities if the product has caused adverse impacts (sewers, watercourses, soil or air).</p>	
6.3	Methods and material for containment and cleaning up	
	<p>In case of accidental spills and leaks, avoid dispersal of spilled material. Use water spray or foam to control vapors. Make a protective barrier and ensure closure of drains with suitable containment material. Absorb with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep and shovel into suitable containers for disposal.</p>	
6.4	Reference to other sections	
	<p>See Section 1 for information on contact in case of emergency. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.</p>	
SECTION 7	Handling and storage	
7.1	Precautions for safe handling	
	Technical precautionary measures	<p>Wear appropriate personal protective equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering food areas. Avoid contact with eyes, skin or clothing. Do not breathe vapours or mist. Do not ingest. Avoid release to the environment. Keep in original container or approved alternative made of compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residues and may be hazardous. Do not reuse container.</p>

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	Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.		
7.2	Conditions for safe storage, including any incompatibilities			
	Wear appropriate personal protective equipment. Avoid contact with eyes, skin or clothing. Do not breathe vapors or mist. Do not ingest. Avoid release to the environment. Keep in original container or approved alternative made of a compatible material, kept tightly closed when not in use. Empty containers retain product residues and may be hazardous. Do not reuse container. Avoid handling incompatible substances, see section 7.2. and 10.			
7.3	Specific end use(s)			
	Use only as described in section 1.2.			
SECTION 8	Exposure controls/personal protection			
8.1	Control parameters			
	Occupational exposure	There is no limit of occupational exposure value.		
	Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of ventilation or other control measures and/or the need to use respiratory protective equipment. Monitoring standards such as the following may be used as reference: European Standard EN 689 (Atmospheres in the workplace. Guidelines for the evaluation of inhalation exposure of chemical agents for comparison with limit values and measurement strategy), European Standard EN 14042 (atmospheres in the workplace. Guidelines for the application and use of procedures to assess exposure to chemical and biological agents) European Standard EN 482 (atmospheres in the workplace. General requirements for the performance of procedures for measuring chemical agents). National guidance documents on methods for the determination of hazardous substances should also be used as a reference.		
	Derived effect levels	No DELs available.		
	Predicted effect concentrations	No PECs available.		
	Ingredients with limit values that require monitoring at the workplace	CAS: 7697-37-2 nitric acid WEL: Short-term value: 2.6 mg/m ³ , 1 ppm		
DNEL				
Substance		10377-60-3	10124-37-5	7697-37-2
		Magnesium nitrate	Calcium nitrate	Nitric acid

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Industrial/Professional worker	Inhalation (mg/m³)	Long-term	Systemic	No hazard has been identified but no further information is needed as no exposure is expected to occur.	Hazards are unknown but no further information is needed as no exposure to the substance is expected to occur	Low risk (no threshold was derived)
			Local	No hazard has been identified	Hazards are unknown but no further information is needed as no exposure to the substance is expected to occur	Low risk (no threshold was derived)
		Short-term	Systemic	No hazard has been identified but no further information is needed as no exposure is expected to occur.	Hazards are unknown but no further information is needed as no exposure to the substance is expected to occur	2,6 mg/m ³
			Local	No hazard has been identified	Hazards are unknown but no further information is needed as no exposure to the substance is expected to occur	2,6 mg/m ³
	Dermal (mg/kg)	Long-term	Systemic	No hazard has been identified	No hazard has been identified	Low risk (no threshold was derived)
			Local	No hazard has been identified	No hazard has been identified	No hazard has been identified

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	pc/día)	Short-term	Systemic	No hazard has been identified	No hazard has been identified	High risk (no threshold was derived)
			Local	No hazard has been identified	No hazard has been identified	High risk (no threshold was derived)
		Long-term	Systemic	Not available	Not available	Not available
			Local	Not available	Not available	Not available
	Ocular (mg/kg pc/día)	Short-term	Systemic	No hazard has been identified	Medium risk (no threshold was derived)	High risk (no threshold was derived)
			Local	No hazard has been identified	Medium risk (no threshold was derived)	High risk (no threshold was derived)
	Inhalation (mg/m3)	Long-term	Systemic	No hazard has been identified but no further information is needed as no exposure is expected to occur.	Hazards are unknown but no further information is needed as no exposure to the substance is expected to occur	Low risk (no threshold was derived)
			Local	No hazard has been identified	Hazards are unknown but no further information is needed as no exposure to the substance is expected to occur	Low risk (no threshold was derived)

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Consumer		Short-term	Systemic	No hazard has been identified	Hazards are unknown but no further information is needed as no exposure to the substance is expected to occur	1,3 mg/m ³
			Local	No hazard has been identified	Hazards are unknown but no further information is needed as no exposure to the substance is expected to occur	1,3 mg/m ³
		Long-term	Systemic	No hazard has been identified	No hazard has been identified	Low risk (no threshold was derived)
			Local	No hazard has been identified	No hazard has been identified	Low risk (no threshold was derived)
	Dermal (mg/kg pc/day)	Short-term	Systemic	No hazard has been identified	No hazard has been identified	High risk (no threshold was derived)
			Local	No hazard has been identified	No hazard has been identified	High risk (no threshold was derived)
		Long-term	Systemic	No hazard has been identified	No hazard has been identified	Low risk (no threshold was derived)
			Local	No hazard has been identified	10 mg/kg bw/day	No hazard has been identified
	Oral (mg/kg pc/day)	Short-term	Systemic	Not available	Not available	Not available
			Local	Not available	Not available	Not available
		Long-term	Systemic	Not available	Not available	Not available
			Local	Not available	Not available	Not available

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	Ocular (mg/kg pc/day)	Short-term	Systemic	No hazard has been identified	Medium risk (no threshold was derived)	High risk (no threshold was derived)
			Local	No hazard has been identified	Medium risk (no threshold was derived)	High risk (no threshold was derived)
PNEC						
Substance				10377-60-3	10124-37-5	7697-37-2
				Magnesium nitrate	Calcium nitrate	Nitric acid
Fresh water (mg/L)				No hazard has been identified	No hazard has been identified	No hazard has been identified
Salt water (mg/L)				No hazard has been identified	No hazard has been identified	No hazard has been identified
STP (mg/L)				18 mg/L	18 mg/L	No hazard has been identified
Fresh water sediment (mg/L)				No hazard has been identified	No hazard has been identified	No hazard has been identified
Salt water sediment (mg/L)				No hazard has been identified	No hazard has been identified	No hazard has been identified
Air (mg/L)				No hazard has been identified	No hazard has been identified	No hazard has been identified
Soil (mg/L)				No hazard has been identified	No hazard has been identified	No hazard has been identified

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		The substance has no bioaccumulation potential	The substance has no bioaccumulation potential	No hazard has been identified
	Predators (secondary poisoning) (mg/L)			
	Components with biological limit values	Non-existent. Page 5/9		
	Additional indications	The Occupational exposure limits lists valid during the making were used as basis.		
8.2	Exposure controls			
	Appropriate engineering controls	If user operations generate gas or vapour, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.		
	Personal protective measures, such as personal protective equipment	General protection and hygiene measures	Wash completely the hands, forearms and face after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Use the appropriate techniques to remove the contaminated clothes. Wash the contaminated clothes before reusing. Verify that the eyes washing stations and safety showers were near to working stations.	
		Respiratory protection	If exposure levels exceed or may exceed the recommended exposure limits, use suitable breathing apparatus e.g. mouth-face masks equipped with type K filters, self-contained breathing apparatus according to EN 136, 140 or 405.	
		Hand protection	Chemical/bio-chemical resistant, impervious gloves complying with an approved chemical standard (EN 374 or local equivalent) should be worn at all times when handling chemical products. For tasks involving physical or mechanical hazards, gloves should also comply with an approved physical standard (EN 388 or local equivalent)	
		Glove material	Nitrile rubber, NBR	
		Other	Use personal protective equipment during use and handling of the product.	
		Eye/face protection	Wear chemical goggles (with indirect ventilation) when there is a possibility of contact with liquid or mist. The use of a full face shield in addition to goggles is recommended for additional protection. See eye and face protection standard EN 166 for further information. A safety shower and eye wash fountain should be provided in the ammonia handling area.	

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	Thermal hazards	Not available.
	Environmental exposure controls	Under EU environmental protection legislation it is recommended to avoid release of the product and its packaging into the environment. For further information see section 6.2.
SECTION 9	Physical and chemical properties	
9.1	Information on basic physical and chemical properties	
	Appearance	Liquid
	Colour	Colourless
	Odour	Odourless
	Odour threshold	Not available.
	pH	5 (5%)
	Melting point/freezing point	-20 ° C
	Initial boiling point and boiling range	Undetermined
	Flash point	Not available
	Evaporation rate	Not available
	Flammability	Non-flammable
	Upper/lower flammability or explosive limits	
	Lower	Not available.
	Upper	Not available.
	Vapour pressure	Not available.
	Vapour density	Not available.
	Relative density	1,3
	Solubility	
	In water	Fully miscible.
	Partition coefficient: n-octanol/water	Not applicable due to physico-chemical characteristics
	Auto-ignition temperature	Not available.
	Decomposition temperature	Not determined.
	Viscosity	
	Kinematic	Not available
	Dynamic	Not available
	Explosive properties	The product is not explosive

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	Oxidising properties	Not available				
9.2	Other information	No additional information No further relevant information available.				
SECTION 10 Stability and reactivity						
10.1	Reactivity	Stable under recommended storage conditions.				
10.2	Chemical stability	Chemically stable under the indicated storage, handling and use conditions.				
10.3	Possibility of hazardous reactions	No dangerous reactions known. In normal conditions of storage and use, hazardous reactions are not produced.				
10.4	Conditions to avoid	No specific data. No further relevant information available.				
10.5	Incompatible materials	Combustible materials, reducing agents, organic matter, acids, alkalis, sulfur, chlorates, chlorides, chromates, nitrites, permanganates, metal powders and substances containing metals such as copper, nickel, cobalt, zinc and their alloys.				
10.6	Hazardous decomposition products	Nitrogen oxides (NO _x) (in case of fire).				
SECTION 11 Toxicological information						
11.1	Information on toxicological effects					
Acute toxicity						
	Component	CAS number	Method	Species	Route	Result
	Magnesium nitrate	10377-60-3	OECD 423 Not specified	Rat Rat	Oral Cutaneous	DL50 > 2000 mg/kg bw. DL50 > 5000 mg/kg bw.
	Calcium nitrate	10124-37-5	Not specified OECD 403 OECD 402	Rat Rat Rabbit	Oral Inhalation Cutaneous	DL50 > 300 - < 2000 mg/kg bw. Category 4. CL50: 2300 mg/m ³ air DL50 > 2000 mg/kg bw
	Nitric acid	7697-37-2	OECD 403	Rat	Inhalation	CL50 > 2,65 mg/l air
Based on available data, the classification criteria are not met.						
Skin corrosion/irritation						
	Component	CAS number	Method	Species	Route	Result
	Magnesium nitrate	10377-60-3	OECD 404	Rabbit	Cutaneous	Non irritant
	Calcium nitrate	10124-37-5	OECD 404	Rabbit	Cutaneous	Non irritant

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Nitric acid	7697-37-2	-	-	-	There are no available studies but a trial is not considered necessary due to the known corrosive properties of acid. Nitric acid is classified as a skin-corrosive substance of category 1A and category 1B according to Annex VI of the CLP Regulation.
Based on available data, the classification criteria are not met.					
Serious eye damage/irritation					
Component	CAS number	Method	Species	Route	Result
Magnesium nitrate	10377-60-3	OECD 405	Rabbit	Ocular	Non irritant
Calcium nitrate	10124-37-5	OECD 405	Rabbit	Ocular	Non irritant
Nitric acid	7697-37-2	-	-	-	There are no available studies but based on the properties of the substance it is classified as corrosive to the eyes.
Causes serious eye irritation.					
Respiratory or skin sensitisation					
Component	CAS number	Method	Species	Route	Result
Magnesium nitrate	10377-60-3	OECD 429	Mouse	Cutaneous	Non sensitising
Calcium nitrate	10124-37-5	-	-	-	Not available
Nitric acid	7697-37-2	-	-	-	There are no available studies. The substance is classified as corrosive to the skin therefore it is not necessary to carry out other studies for sensitization.
Based on available data, the classification criteria are not met.					
Germ cell mutagenicity					
Component	CAS number	Method	Species	Result	

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Magnesium nitrate	10377-60-3	OECD 471 OECD 473 OECD 476	Bacteria Cromosomic aberration Mutation of mammal cells	Non mutagenic
Calcium nitrate	10124-37-5	Not specified	Bacterias Chromosomic aberration	Non mutagenic
Nitric acid	7697-37-2	OECD 471 OECD 473 OECD 476	Bacteria Cromosomic aberration Mutation of mammal cells	Non mutagenic

Based on available data, the classification criteria are not met.

Carcinogenicity

Component	CAS number	Method	Species	Route	Result
Magnesium nitrate	10377-60-3	-	-	-	Not available
Calcium nitrate	10124-37-5	-	-	-	Not available
Nitric acid	7697-37-2	-	-	-	Two unreliable studies are available for nitric acid with respect to carcinogenicity. These studies are of limited value due to the short duration of exposure and the inadequate way in which the design and results of the studies were reported. A 2-year study of Rats showed that the incidence of tumors had not increased. The substance is not carcinogenic.

Based on available data, the classification criteria are not met.

Reproductive toxicity

Component	CAS number	Method	Species	Route	Result
Magnesium nitrate	10377-60-3	OECD 422	Rat	Oral	Effects on fertility: NOAEL >= 1500 mg/kg bw/d. Toxicity for the development: NOAEL >= 1500 mg/kg bw/d
Calcium nitrate	10124-37-5	-	-	-	Not available

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Nitric acid	7697-37-2		Rat	Oral	Effects on fertility: NOAEL > 1500 mg/kg bw/d. Toxicity for the development: NOAEL > 1500 mg/kg bw/d
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Based on available data, the classification criteria are not met.

STOT- single exposure

Component	CAS number	Method	Species	Route	Result
Magnesium nitrate	10377-60-3	Not available	Not available	Not available	Not available
Calcium nitrate	10124-37-5	-	-	-	Not available
Nitric acid	7697-37-2	Not available	Not available	Not available	Not available

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Component	CAS number	Method	Species	Route	Result
Magnesium nitrate	10377-60-3	OECD 422	Rat	Oral	NOAEL >= 1500 mg/kg bw/d
Calcium nitrate	10124-37-5	Not specified	Rat	Inhalation	NOAEL > 10 mg/m3 aire
Nitric acid	7697-37-2	OECD 422 OECD 412 OECD 413	Rat Rat	Oral Inhalation	NOAEL: 1500 mg/kg bw/d NOAEL: 4,11 mg/m3

Based on available data, the classification criteria are not met.

Aspiration hazard

Component	CAS number	Result
Magnesium nitrate	10377-60-3	No significant effects or critical hazards are known.
Calcium nitrate	10124-37-5	-
Nitric acid	7697-37-2	No significant effects or critical hazards are known.

Based on available data, the classification criteria are not met.

SECTION 12	Ecological information
12.1	Toxicity
	Aquatic toxicity

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Component	N° CAS		Fish	Crustacea	Algae
Magnesium nitrate	10377-60-3	Short term	CL50(96h) > 100 mg/l	NOEC: 157 mg/l	CE50(48h): 490 mg/l
		Long term	Not available	CE50(72h): 1700 mg/l	CE10/NOEC: 1700 mg/l
Calcium nitrate	10124-37-5	Short term	NOEC: 100 mg/L	No studies are required according to column 2	CE50: 490 mg/L
		Long term	Not available	CE50: 1700 mg/l	CE10/NOEC: 1700 mg/l
Nitric acid	7697-37-2	Short term	pH lethal (96h): 3-3,5 (Lepomis)	It is not necessary to carry out studies	pH lethal (48h): 4,4-4,7 (ceriodaphnia dubia)
		Long term	According to Annex IX of REACH, testing is not necessary if the results of the chemical safety study indicate that	An exemption is proposed for this section, and a study conducted with potassium nitrate is presented as evidence.	An exemption is proposed for this section, and a study conducted with potassium nitrate is presented as evidence.

Terrestrial toxicity

Component	N° CAS	Macro-organism	Micro-organism	Terrestrial plants	Other organisms
Magnesium nitrate	10377-60-3	Not available	Not available	Not available	-
Calcium nitrate	10124-37-5	Not available	Not available	Not available	-
Nitric acid	7697-37-2	Not available	Not available	Not available	-

Microbiological activity in wastewater treatment plants

Component	N° CAS	Toxicity to aquatic micro-organisms
Magnesium nitrate	10377-60-3	CE50 > 1000 mg/l NOEC: 180 mg/l
Calcium nitrate	10124-37-5	CE50: 1000 mg/l CE10/NOEC: 180 mg/l
Nitric acid	7697-37-2	A waiver is proposed for this section and a study conducted with sodium nitrate is presented as supporting evidence.

12.2

Persistence and degradability

Component	N° CAS	Degradation	
Magnesium nitrate	10377-60-3	Hydrolysis	Hydrolysis is not seen. It is not necessary.
		Photolysis	Not available.
		Biodegradation	According to Annex VII of REACH, It is not necessary to carry out biodegradability studies since the substance is inorganic.
Calcium nitrate	10124-37-5	Hydrolysis	It is an inorganic substance, soluble in water. It is a neutral salt; ions have little tendency to react with water. Hydrolysis is not relevant.
		Photolysis	Not scientifically necessary

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			Biodegradation	Not necessary as the substance is inorganic	
	Nitric acid	7697-37-2	Hydrolysis	Scientifically not necessary	
			Photolysis	Not available.	
			Biodegradation	Not available.	
12.3	Bioaccumulative potential				
	Component	N° CAS	Octanol-water partition coefficient (Kow)	Bioaccumulation factor (BFC)	Observations
	Magnesium nitrate	10377-60-3	-	-	Simple inorganic salts with high solubility in water exist dissociated in an aqueous solution. This type of substance has a low bioaccumulation potential.
	Calcium nitrate	10124-37-5	-	-	It is an inorganic substance therefore has a low potential for accumulation
	Nitric acid	7697-37-2	Not applicable.	-	-
12.4	Mobility in soil				
	Component	N° CAS	Result		
	Magnesium nitrate	10377-60-3	Simple inorganic salts have a high solubility in water and exist dissociated in aqueous solution. This type of substance has a low adsorption potential.		
	Calcium nitrate	10124-37-5	Being an inorganic substance it has a low adsorption potential.		
	Nitric acid	7697-37-2	No information available.		
12.5	Results of PBT and vPvB assessment				
	Not applicable.				
12.6	Other adverse effects				
	Significative effects or critical risks are not known.				
SECTION 13	Disposal considerations				
13.1	Waste treatment methods				

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Methods of disposal	<p>Waste management (disposal and recovery) : Consult the authorised waste manager for recovery and disposal operations, in accordance with Annex 1 and Annex 2 (Directive 2018/851/EC, Law 7/2022 of 8 April, on waste and contaminated soil for a circular economy).. Packaging: According to codes 15 01 (Commission Decision 2014/955/EU), if the packaging has been in direct contact with the product, it should be treated in the same way as the product itself, otherwise it should be treated as non-hazardous waste. Discharge into waste water is not recommended. See section 6.2.</p> <p>Waste management provisions : In accordance with Annex II of Regulation (EC) No 1907/2006 (UK REACH), the Community or national provisions on waste management are presented. Community legislation: Directive 2018/851/EC, Commission Decision 2014/955/EU, Regulation (EU) no. 1357/2014 and the national legislation.</p>
Hazardous waste code	HP4: Irritant - skin irritation and eye damage

SECTION 14 Transport information

	Regulatory information	ADR/RID	ADNR	IMDG	IATA
14.1	UN number	-			
14.2	UN proper shipping name	-	-		
14.3	Transport hazard class(es)				
	Class	-	-		
	Label	-	-		
14.4	Packing group	-			
14.5	Environmental hazards	Product not classified as hazardous to the aquatic environment.			
14.6	Special precautions for user	Not defined. See the relevant information, such as handling, in other sections of this document.			
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	
	GB Regulation (EC) No 1907/2006 (REACH)	This product complies with the UK REACH Regulation.
	Named dangerous substances - ANNEX VI (CLP)	None substance listed.
	SEVESO Category	Not applicable.
	Qualifying quantity (tonnes) for the application of lower-tier requirements	Not applicable.

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	Qualifying quantity (tonnes) for the application of upper-tier requirements	Not applicable.
	Regulation (EC) No 1907/2006 - ANNEX XVII	Not applicable.
15.2	Chemical safety assessment	
	A chemical safety assessment has not been carried out since it is a mixture (exempt from registration).	
SECTION 16 Other information		
	Relevant phrases	H272 May intensify fire; oxidiser. H290 May be corrosive to metals. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H331 Toxic if inhaled.
	Abbreviations and acronyms	ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road). STP: Sewage treatment plant. OECD: Organisation for Economic Co-operation and Development. NOAEL: No observed adverse effect level. IMDG: International Maritime Code for Dangerous Goods. IATA: International Air Transport Association. DNEL: Derived No-Effect Level (UK REACH). PNEC: Predicted No-Effect Concentration (UK REACH).
	Data compared to the previous version altered	Adaptation to Commission Regulation (EU) No 2015/830.
	References	This safety data sheet has been prepared in accordance with: - ANNEX II: Guidance for the preparation of Safety Data Sheets of Regulation (EC) No 1907/2006 (Regulation (EU) 2020/878) based on the data included in the chemical safety report of registered substances. - Guidance available on the European Chemicals Agency (ECHA) website: (http://echa.europa.eu/). - Guidance for the compilation of safety data sheets for fertilizer materials (www.fertilizerseurope.com).
	Methods used for the classification of the mixture (Article 9 of Regulation (EC) No 1272/2008)	Classification and Labeling in accordance with the principle of extrapolation of Regulation No. 1272/2008 (CLP).

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Advice on any training appropriate for workers to ensure protection of human health and the environment

Minimum training in the prevention of occupational hazards is recommended for personnel who will handle this product, in order to facilitate the understanding and interpretation of this safety data sheet, as well as the product label.

The information contained in this safety data sheet is provided in good faith and its accuracy is based on knowledge of the product at the time of publication. The information presented is only intended to describe the product from the point of view of human and environmental protection and safety, and therefore cannot be regarded as product specifications. It does not imply acceptance of any commitment or legal responsibility on the part of the Company, for the consequences of its use or misuse in any circumstances. The information provided is considered accurate and current at the time of this edition, referring only to the product and may not be valid in compositions or formulations with other products. The responsibility for its use belongs to the users.