Safety Data Sheet

Advanced Nutrients Jungle Juice Micro

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

1.1. Product identifier

Product name : Advanced Nutrients Jungle Juice Micro.
Product code : 1750
Formula code : 003A
REACH Product type : Mixture.
REACH registration number : See section 3.
UFI : F8U4-N06J-400A-EVPD.

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

1.2.1 Identified uses:

Fertilising product.

1.2.2. Uses advised against:

Not to be used as food or feed in any forms.

1.3. Details of the supplier of the safety data sheet

Advanced Nutrients SP, SLU
Calle 23, Nave 6
Zona Franca Parc Logistic
08040 Barcelona (Spain)
Tel. (+34) 930 117 163
www.advancednutrients.com

E-mail address of competent person responsible for the SDS: info@advancednutrients.com.

1.4. Emergency telephone number

CHEMTREC Emergency Phone Numbers:
1-800-424-9300 (North America, including Canada and Mexico) CCN 613830.
1+703-527-3887 (International) CCN 613830.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation EC No 1272/2008 (CLP):

Hazards	Hazard class and category	Hazard statement code
Physical Hazards:	Not classified.	-
Health hazards:	Acute Tox. 4 (oral) Eye Dam. 1	Harmful if swallowed (H302). Causes serious eye damage (H318).
Environmental hazards:	Not classified.	-

2.2. Label elements

Labelling in accordance with Regulation (EC) 1272/2008:

Signal word:

Danger.

Hazard pictograms:

Hazard statements:

H302: Harmful if swallowed.

H318: Causes serious eye damage.

Precautionary statements:

P102: Keep out of reach of children.

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/eye protection.

P301+P312: IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental information:

Contains: Ammonium calcium nitrate double salt (CAS 15245-12-2).

2.3. Other hazards

This mixture does not contain any substance considered PBT or vPvB, or identified as having endocrine disrupting properties, in a concentration equal to or greater than 0.1% by weight.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable.

3.2. Mixtures

Substances presenting a health or environmental hazard within the meaning of Regulation (EC) No 1272/2008; substances for which there are Union workplace exposure limits; substances that are PBT or vPvB; or included in the Candidate List for authorisation:

Name of ingredient	Identifiers	Conc. (w/w)	CLP Classification [#1]	SCL / M factors / ATE
Ammonium calcium nitrate double salt	CAS: 15245-12-2 EC: 239-289-5 REACH number: 01-2119493947-16 CLP index: -	20 < 40 %	Acute Tox. 4; H302 Eye Dam. 1; H318	**SCL**: Not applicable. **M-factor acute**: Not applicable. **M-factor chronic**: Not applicable. **ATE oral**: 500 mg/kg. **ATE inh.**: Not available. **ATE dermal**: > 2000 mg/kg.
Zinc nitrate	CAS: 7779-88-6 EC: 231-943-8 REACH number: 01-2119488498-16 CLP index: -	0.1 < 0.3 %	Oxid. Solid 2; H272 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	**SCL**: Not applicable. **M-factor acute**: 1. **M-factor chronic**: Not applicable. **ATE oral**: 500 mg/kg. **ATE inh.**: Not available. **ATE dermal**: > 2000 mg/kg.
Potassium borate	CAS: 1332-77-0 EC: 215-575-5 REACH number: 01-2119970730-37 CLP index: -	0.1 < 0.3 %	Repr. 2; H361	**SCL**: Not applicable. **M-factor acute**: Not applicable. **M-factor chronic**: Not applicable. **ATE oral**: 3690 mg/kg. **ATE inh.**: Not available. **ATE dermal**: > 2000 mg/kg.

Copper nitrate	CAS: 3251-23-8 EC: 221-838-5 REACH number: 01-2119969290-34 CLP index: -	0.01 < 0.1 %	Oxid. Solid 2; H272 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	**SCL**: Not applicable. **M-factor acute**: 10. **M-factor chronic**: Not applicable. **ATE oral**: Not available. **ATE inh.**: Not available. **ATE dermal**: Not available.
Cobaltous nitrate, hexahydrate	CAS: 10026-22-9 EC: 233-402-1 REACH number: 01-2119542530-49 CLP index: 027-009-00-2	0.01 < 0.02 % (Ca. 0.005 % as Co)	Oxid. Solid 2; H272 Acute Tox. 4; H302 Eye Dam. 1; H318 Skin Sens. 1A; H317 Resp. Sens. 1B; H334 Muta. 2 H341; Carc. 1B; H350i Repr. 1B; H360Fd Aquatic Acute 1; H400 Aquatic Chronic 1; H410	**SCL**: Carc. 1B; H350i: C ≥ 0.01 %. SCL Applicable notes (annex VI CLP): Note 1 [See #2]. **M-factor acute**: 10. **M-factor chronic**: 10. **ATE oral**: 691 mg/kg. **ATE inh.**: Not available. **ATE dermal**: Not available.

[#1] For the full text of the hazard statement codes mentioned in this section, see section 16.

[#2] Annex VI CLP Note 1: *The concentration stated or, in the absence of such concentrations, the generic concentrations set out in this Regulation are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture*. Considering the percentage by weight of the metallic element (cobalt), calculated with reference to the total weight of the mixture (ca. 0.005 %), the substance does not contribute to the mixture classification as it is below the relevant thresholds.

SECTION 4: First aid measures

4.1. Description of first aid measures

Symptoms resulting from chemical poisoning may manifest after a prolonged period following exposure. Therefore, in case of doubt or discomfort, medical attention should be sought, and this SDS should be shown to medical personnel.

Inhalation:	In case of discomfort, move the affected person to a well-ventilated area, loosen their clothing, place them in the most comfortable position, and protect them from cold. Seek immediate medical attention if any discomfort or respiratory difficulty arises.
Skin contact:	Rinse the affected area thoroughly with plenty of water and neutral soap. Seek medical attention if any irritation or redness develops or persists.
Eye contact:	Rinse eyes with plenty of water at room temperature for at least 15 minutes. Prevent the person from rubbing or closing their eyes. If the person uses contact lenses, these should be removed as long as they are not stuck to their eyes, otherwise further damage may occur. Seek medical attention immediately and show this SDS to the emergency services.
Ingestion:	If the victim is unconscious, do not give anything to drink or eat. Seek medical attention immediately and show this SDS to the emergency services. If the affected person is conscious, rinse the mouth with plenty of water to decontaminate the oral mucosa, but do not allow swallowing. DO NOT INDUCE VOMITING unless medically prescribed. In the event of spontaneous vomiting, hold the person's head forward to prevent aspiration. Seek medical attention and show this SDS to the emergency services.

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

4.2.1. Acute effects:

Harmful if swallowed. Ingestion may cause throat irritation, abdominal pain, vomiting, diarrhoea, weakness, blue lips, fingernails and skin. Causes serious eye damage. Prolonged skin contact might cause irritation.

4.2.2. Delayed effects:

Ingestion could cause effects on the blood and this may result in the formation of methaemoglobin.

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

This mixture contains nitrates (ca. 40%), specific treatment is necessary in case of poisoning with this product; the appropriate means with instructions must be available. Nitrate ion is not toxic, but due to the action of anaerobic bacteria (in gastrointestinal tract) 5%–20% of ingested nitrate is converted to nitrite, which is more toxic. The effects may be delayed. Medical observation is indicated.

It is strongly advised to have an eye-wash station in close proximity to the area where this product is being processed or handled.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1. Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire**.**

5.1.2. Unsuitable extinguishing media: Not known.

5.2. Special hazards arising from the substance or mixture

As a result of combustion or thermal decomposition, reaction sub-products are created that can become highly toxic and, consequently, can present a serious health risk. Thermal decomposition products include sulphur oxides, oxides of nitrogen, oxides of carbon, ammonia and metal oxides.

5.3. Advice for firefighters

In the event of fire, quickly isolate the area by evacuating all persons from the vicinity of the incident. Refrain from any action which may endanger other persons and do not allow untrained personnel to intervene. Move containers from fire area if this can be done without risk. Keep drums cool by spraying with water. Combat fire from a sheltered position.

Fire-fighters must wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operating in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 provides a basic level of protection for chemical incidents. Clothing not conforming to EN 469 may not be suitable in any chemical incident.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel: Alert your colleagues and ensure good ventilation while evacuating the area. Keep unnecessary personnel away from the area where the spill has occurred. Do not touch or walk through spilled material.

6.1.2. For emergency responders: Keep unnecessary personnel away. Ventilate area as necessary. Prevent entry of product into basements. Avoid direct contact with the product by using appropriate personal protective equipment during all clean-up activities.

6.2. Environmental precautions

Prevent spilled contents from entering watercourses. Notify the relevant authorities if a large quantity of the product reaches watercourses or the sewage system.

6.3. Methods and material for containment and cleaning up

6.3.1. Large spills: Contain with non-combustible absorbent materials such as sand or earth to prevent from reaching drains or waterways. Do not absorb in sawdust or other combustible material. It may lead to a fire risk when it dries out. Scoop or shovel spilled material into properly labelled containers that can be closed, then store and dispose of according to local regulations. Spilled uncontaminated solutions may be applied to plants or land as a fertilizer according to package directions.

6.3.2. Small spills: Contain with non-combustible absorbent materials and collect mechanically the spilled material. Place it into an appropriate container. Then store and dispose of the waste in accordance with local regulations or reuse uncontaminated material as a fertilizer according to package directions.

6.4. Reference to other sections

For personal protection, see section 8.
For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Exposure scenario – Fertiliser products ***Ammonium calcium nitrate double salt - CAS: 15245-12-2***	
Identified uses:	▪ Professional formulation of fertiliser products. ▪ Professional use as fertiliser at farm - loading and spreading. ▪ Professional use as fertiliser in greenhouse. ▪ Professional use as liquid fertiliser in open field.
Descriptors of use*:	PROC05, PROC08a, PROC08b, PROC09, PROC11, PROC13, PROC15, PROC19, PROC26.
Environmental Release Category*:	ERC08b, ERC08e.
Type of chemical product:	PC12 (fertiliser).
Operational conditions:	
Concentration of substance in mixture or article:	<= 100 %
Physical state:	Liquid.
Frequency and duration of use:	<= 8 h/d
Area of use:	Indoor/ Outdoor.
Risk management measures:	
Ventilation control measures:	Ensure adequate ventilation. Provide a basic standard of general ventilation (1 to 3 air changes per hour).
Conditions and measures related to personal protection and hygiene:	Always observe good occupational hygiene practices: Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.
Personal protection:	Avoid breathing vapours. Avoid contact with eyes, skin, and clothing. Wear suitable coveralls to prevent exposure to the skin, chemical splash goggles or face shield. Wear suitable gloves tested to EN374, butyl rubber, chloroprene rubber, nitrile. See Section 8 (personal protective equipment).
Additional good practice advice beyond the REACH Chemical Safety Assessment:	Handle and open the container with caution. Keep container tightly closed when not in use. Do not mix the product with incompatible materials (see section 10).
Exposure estimation and reference to its source:	
Exposure estimation and reference to its source - Workers:	Available hazard data do not enable the derivation of a DNEL for eye irritant effects, qualitative approach was used to conclude safe use. Oral exposure is not expected to occur. Inhalation exposure is considered to be not relevant. Environmental exposure assessment for this scenario is not relevant.
Guidance to DU to evaluate whether they work inside the boundaries set by the ES:	
Comply with the safety instructions included in this safety data sheet. Please carefully review the usage guidelines provided on the labelling. Risk management measures are based on qualitative risk characterisation assuming the conditions of use described in this SDS.	

* See section 16 for the full PROC and ERC codes.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Requirements for safe storage: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials, food, and feed. Keep container tightly closed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.2.2. Keep the product away from: Combustible materials, reducing materials, organic materials, strong acids, strong bases, halogens, chlorine, chlorinated compounds, hydrogen peroxides, oil and grease.

7.2.3. Unsuitable packaging material: Not known.

7.3. Specific end use(s)

Fertiliser [REACH Product Category (PC) 12].

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure:

a) Occupational exposure limit values:

Country	CAS	Name of agent	Long-term (mg/m³)	Short-term (mg/m³)	Notation
Germany (DFG)	7779-88-6	Zinc nitrate	2 (1) 0.1 (2)	4 (1) 0.4 (2)	(1) Inhalable fraction. (2) Respirable fraction.
Germany (DFG)	-	Tetraborates	0.75 (1) (2)	0.75 (1) (2) (3)	(1) mg/m³ inhalable aerosol. (2) Calculated as boron. (3) In the case of simultaneous appearance of boric acid and tetraborates counts 0,75 mg/m³ calculated as boron.
Austria	3251-23-8	Copper nitrate	1 (1)	4 (1)	(1) Inhalable fraction.
Finland			0.02 (1) (2)	-	(1) Respirable fraction. (2) Calculated as Cu.
Germany (DFG)			0.01 (1)	0.02 (1)	(1) Respirable fraction.
Hungary			0.1	0.2	-
Latvia			0.5 (1)	1 (1)	(1) Inhalable fraction.
Poland			0.2 (1)	-	(1) as Cu.
Spain			0.01 (1) (2)	-	(1) Respirable fraction. (2) as Cu.
Sweden			0.01 (1)	-	(1) Respirable fraction.
The Netherlands			0.1 (1)	-	(1) Inhalable fraction.
Austria	10026-22-9	Cobaltous nitrate hexahydrate	0.5 (1) (2)	2 (2)	(1) Inhalable fraction. (2) Skin.
Belgium			0.02	-	-
Denmark			0.01	0.02	-
Finland			0.02	-	-
Germany (AGS)			0.005 (1) (2) 0.0005 (1) (3)	0.04 (1) (2)	(1) Respirable fraction. (2) Workplace exposure concentration corresponding to the proposed tolerable cancer risk. (3) Workplace exposure concentration corresponding to the proposed preliminary acceptable cancer risk.
Hungary			0.02	-	-
Ireland			0.02	-	-
Latvia			0.5	-	-
Norway			0.02	-	-
Poland			0.02	-	-
Romania			0.05	0.1	-
Spain			0.02	-	-
Sweden			0.02	-	-
The Netherlands			0.02	-	-

b) Biological limit values (BLV):

There are no available biological limit values at EU level. National biological limit values may be applicable, please check your EU Member State local regulations.

8.1.2. Recommended monitoring procedures: Follow standard monitoring procedures (e.g. EN 14042:2004 Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents).

8.1.3. Threshold values:

Hazardous substances contributing to the mixture classification:

Ammonium calcium nitrate double salt (CAS: 15245-12-2)

Derived no-effect levels (DNEL):

Ammonium calcium nitrate double salt (CAS: 15245-12-2):

	Workers				General population			
	Local		Systemic		Local		Systemic	
Route	Acute	Long-term	Acute	Long-term	Acute	Long-term	Acute	Long-term
Oral	-	-	-	-	-	-	10 mg/kg	[2]
Inhalation	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]
Dermal	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
Eyes	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]

[1] Hazard unknown but no further hazard information necessary as no exposure expected. [2] No hazard identified. [3] Medium hazard (no threshold derived).

Predicted no-effect concentration (PNEC):

Ammonium calcium nitrate double salt (CAS: 15245-12-2):

Environmental compartment	PNEC
Freshwater	No hazard identified.
Freshwater sediment	No hazard identified.
Marine water	No hazard identified.
Marine water sediment	No hazard identified.
STP	No hazard identified.
Soil	No hazard identified.
Air	No hazard identified.
Secondary poisoning	No potential for bioaccumulation.

8.2. Exposure controls

8.2.1. Appropriate engineering controls: If user operations generate fumes, gas, vapor, or mist, provide appropriate ventilation controls to minimize worker exposure. Provide a basic standard of general ventilation (1 to 3 air changes per hour).

8.2.2. Individual protection measures:

General information:	Ask for advice to your PPE provider and always require that equipment has CE marking. The use of personal protective equipment is mandatory for handling the product. Workers must be trained in the use of protective equipment.
Respiratory protection:	If engineering controls and work practices are not effective in reducing concentration below permissible limits, use respiratory protection. Appropriate respiratory equipment: Filter respirator for gases or gases and particles adapted to the airborne concentration of the substance (half masks in accordance to EN 405:2002+A1:2010).
Hand protection:	Use protective gloves according to EN 374:2020. Recommended materials: nitrile, butyl rubber, chloroprene. Thickness of the glove will depend on the specific application; consult with your PPE supplier.

	For general applications, gloves with a thickness typically greater than 0.35 mm are recommended. Since the product is a mixture of different materials, the resistance and thickness of the glove material cannot be reliably calculated in advance, so it is recommended to test them before use. Gloves should be replaced immediately if any signs of degradation are observed.
Eye protection:	Use face shield or safety glasses according to EN 166, with universal frame and side protection or integral frame, of motorcyclist or diving type, well-fitted, with plastic lenses (e.g., clear PVC). Avoid the use of contact lenses during the handling of chemical products.
Body protection:	Wear industrial-type work clothing that covers the entire body, with long sleeves.
Hygiene measures:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Routinely wash clothing and protective equipment to remove contaminants. Follow the manufacturer's instructions for cleaning/maintaining personal protective equipment. If such instructions are not available, use detergent and hot water for washing. Keep and wash PPE separate from other clothing.

8.2.3. Environmental exposure controls

No specific restrictions, follow your local regulations.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

(a) Physical state:	Liquid.
b) Colour:	Dark burgundy, opaque.
(c) Odour:	Chemical/Mineral.
(d) Melting point/freezing point:	-14°C (6.8°F).
(e) Boiling point or initial boiling point and boiling range:	100°C (212°F).
(f) Flammability:	Not flammable.
(g) Lower and upper explosion limit:	No data available.
(h) Flash point:	No data available.
(i) Auto-ignition temperature:	No data available.
(j) Decomposition temperature:	No data available.
(k) pH:	5.7
(l) Kinematic viscosity:	No data available.
(m) Solubility:	Soluble in water.
(n) Partition coefficient n-octanol/water (log value):	Not applicable (mixture).
(o) Vapour pressure:	No data available.
(p) Density and/or relative density:	1.23 g/ml.
(q) Relative vapour density:	No data available.
(r) Particle characteristics:	Not applicable (liquid).

9.2. Other information

No further information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction expected when handled and stored appropriately.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid

Keep from freezing. Avoid contamination of the product with metals, dust, and organic materials.

10.5. Incompatible materials

Keep away from combustible materials, reducing materials, organic materials, strong acids, strong bases, halogens, chlorine, chlorinated compounds, hydrogen peroxides, oil and grease.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not form.

SECTION 11: Toxicological information

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

11.1.1. Toxicological data:

Unless stated otherwise, calculation methods established in Part 3 of Annex I of Regulation (EC) 1272/2008 were used for the purpose of classification.

a) Acute toxicity:	**Ammonium calcium nitrate double salt (CN-Nitcal, CAS: 15245-12-2):** **LD50 oral:** Based on a reliable acute oral toxicity study (OECD 423) the LD50 is determined to be >300 mg/kg bw and <2000 mg/kg bw for CN-Nitcal. For purposes of classification, 500 mg/kg is used as converted acute toxicity point estimate in accordance to CLP table 3.1.2. **LD50 dermal:** >2000 mg/kg (rat, OECD 402). Extrapolation from similar substance (Nitcal-K). **LC50 inhalation:** An acute inhalation study is not considered necessary as the vapour pressure is assumed to be very low and the particle size is very high with an MMAD > 2000 µm. Based on available data, the classification criteria are met (Acute tox. 4 – H302: Harmful if swallowed). Method: calculation. **ATE mix oral**: Ca. 1250 mg/kg.
b) Skin corrosion/irritation:	The mixture does not contain classified substances above relevant thresholds. Based on available data, the classification criteria are not met (method: calculation; source: supplier SDS).
c) Serious eye damage/irritation:	An in vivo eye irritation study (OECD 405) with CN-Nitcal did show severe eye irritating effects in rabbits. Based on available data, the classification criteria are met (Eye Dam. 1 – H318: Causes serious eye damage). Method: calculation; source: supplier SDS.
d) Respiratory or skin sensitisation:	Skin sensitisation: The mixture does not contain classified substances above relevant thresholds. Based on available data, the classification criteria are not met (method: calculation; source: supplier SDS). Respiratory sensitisation: The mixture contains Cobaltous nitrate, hexahydrate (Resp. Sens. 1B) below relevant thresholds, not contributing to the mixture classification. No further data available for other ingredients.
e) Germ cell mutagenicity:	The mixture does not contain classified substances above relevant thresholds. Based on available data, the classification criteria are not met (method: calculation; source: supplier SDS).
f) Carcinogenicity:	The mixture does not contain classified substances above relevant thresholds. Based on available data, the classification criteria are not met (method: calculation; source: supplier SDS).
g) Reproductive toxicity:	The mixture does not contain classified substances above relevant thresholds. Based on available data, the classification criteria are not met (method: calculation; source: supplier SDS).

h) STOT-single exposure:	The mixture does not contain classified substances above relevant thresholds. Based on available data, the classification criteria are not met (method: calculation; source: supplier SDS).
i) STOT-repeated exposure:	The mixture does not contain classified substances above relevant thresholds. Based on available data, the classification criteria are not met (method: calculation; source: supplier SDS).
j) Aspiration hazard:	The mixture does not contain classified substances above relevant thresholds. Based on available data, the classification criteria are not met (method: calculation; source: supplier SDS).

11.1.2. Information on the likely routes of exposure

The product can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion.

11.2. Information on other hazards

Endocrine-disrupting properties for human health have not been identified for the components of this mixture.

SECTION 12: Ecological information

12.1. Toxicity

Calculation methods established in Part 4 of Annex I of Regulation (EC) 1272/2008 have been used for hazard classification. The mixture does not contain substances classified as hazardous to the environment above relevant thresholds.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

PBT assessment is not applicable (mixture).

12.6. Endocrine disrupting properties

Endocrine-disrupting properties for the environment have not been identified for the components of this mixture.

12.7. Other adverse effects

Large quantities of fertiliser released into the environment may kill vegetation and fish and cause algae blooms if bodies of water are contaminated.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Please contact your supplier or an authorized waste management facility if you need guidance on disposing of the product.

Remaining product: Same safety measures in place for handling the product must be taken into consideration when handling waste. Waste should not be disposed of by release to sewers. Waste should be delivered to an authorized waste management facility for proper treatment and disposal.

Contaminated packaging: Disposal should be carried out in accordance with local regulations.

European waste code: 06 10 (fertiliser waste).

Applicable regulations (EU): Directive 2008/98/EC. Check your local regulations regarding waste.

SECTION 14: Transport information

14.1. UN number or ID number

Not defined as dangerous goods under transport regulations.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

- REACH Annex XVII - Use Restrictions: Inorganic ammonium salts (entry 65) - Shall not be placed on the market, or used, in cellulose insulation mixtures or cellulose insulation articles.
- REACH Annex XIV - List of substances subject to authorization: Not listed.
- PIC Procedure (Regulation EC 649/2012): Not applicable.
- Fertilising products (Regulation (EU) 2019/1009): PFC 1(C)(I)(b)(i): Straight liquid inorganic macronutrient fertilizer.
- Explosives precursors (Regulation (EU) 2019/1148): Contains calcium ammonium nitrate (CAS 15245-12-2). Acquisition, introduction, possession or use of this product by members of the general public is subject to reporting obligations as set out in Regulation (EU) 2019/1148 (Article 9: suspicious transactions and significant disappearances and thefts are to be reported to the national contact point within 24 hours).
- Drug Precursors (Regulation CE 273/2004): Not applicable.

Storages:

- Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances (SEVESO): Not applicable.
- Please refer to your local regulations on the storage of chemical products.
- Water hazard class (WGK) – Germany (AwSV): AWG (WGK 1).

15.2. Chemical safety assessment

Supplier has not carried out a chemical safety assessment of the mixture. Relevant exposure scenarios for the hazardous substances contained in the mixture that contribute to the classification have been compiled and included in section 7.

SECTION 16: Other information

Advice on any training appropriate for workers:

To ensure protection of human health and environment, workers must be provided with proper training about how to handle and store chemicals used at work.

Hazard statements in full and classification codes indicated in section 3:

Oxid. Solid 2: Oxidising Liquids, hazard category 2.

H272: May intensify fire; oxidiser.

Acute Tox. 4: Acute toxicity (oral), hazard category 4.

H302: Harmful if swallowed.
Skin Corr. 1B: Skin corrosion, hazard category 1, sub-category 1B.
H314: Causes severe skin burns and eye damage.
Skin Irrit. 2: Skin irritation, hazard category 2.
H315: Causes skin irritation.
Skin Sens. 1A: Sensitisation — Skin, hazard category 1A.
H317: May cause an allergic skin reaction.
Eye Dam. 1: Serious eye damage, hazard category 1.
H318: Causes serious eye damage.
Resp. Sens. 1B: Sensitisation — Respiratory, hazard category 1B.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT SE 3: Specific target organ toxicity — Single exposure, hazard category 3, respiratory tract irritation.
H335: May cause respiratory irritation.
Muta. 2: Germ cell mutagenicity, hazard category 2.
H341: Suspected of causing genetic defects.
Carc. 1B: Carcinogenicity, hazard category 1B.
H350i: May cause cancer by inhalation.
Repr. 1B: Reproductive toxicity, hazard category 1B.
H360Fd: May damage fertility. Suspected of damaging the unborn child.
Repr. 2: Reproductive toxicity, hazard category 2.
H361: Suspected of damaging fertility or the unborn child.
Aquatic Acute 1: Hazardous to the aquatic environment — Acute hazard, category 1.
H400: Very toxic to aquatic life.
Aquatic Chronic 1: Hazardous to the aquatic environment — Chronic hazard, category 1.
H410: Very toxic to aquatic life with long lasting effects.
Aquatic Chronic 2: Hazardous to the aquatic environment — Chronic hazard, category 2.
H411: Toxic to aquatic life with long lasting effects.

REACH descriptors (section 7):

PROC05 - Mixing or blending in batch processes.
PROC08a - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.
PROC08b - Transfer of substance or mixture (charging and discharging) at dedicated facilities.
PROC09 - Transfer of substance or mixture into small containers (dedicated filling line, including weighing).
PROC11 - Non industrial spraying.
PROC13 - Treatment of articles by dipping and pouring.
PROC15 - Use as laboratory reagent.
PROC19 - Manual activities involving hand contact.
PROC26 - Handling of solid inorganic substances at ambient temperature.
ERC08b - Widespread use of reactive processing aid (no inclusion into or onto article, indoor).
ERC08e - Widespread use of reactive processing aid (no inclusion into or onto article, outdoor).

Abbreviations and acronyms:

ATE	Acute Toxicity Estimation.
CLP	Regulation EC 1272/2008.
LDx	Lethal dose xx%.
LCx	Lethal concentration xx%.
ECx	Effective concentration xx%.
PBT	Persistent, Bioaccumulative and Toxic.
PPE	Personal protective equipment.
REACH	Regulation EC 1907/2006.
SCL	Specific Concentration Limit.
SDS	Safety data sheet.
SVHC	Substances of very high concern.
UFI	Unique Formula Identifier.
vPvB	Very persistent and very bioaccumulative.

Methods of evaluating information used for the purpose of classification: See sections 11 and 12.

Version number: 1.0.

Replaced version: -

Changes compared to the previous version: -

Key literature references and sources for data:

- GESTIS International Limit Values database.
- Internal company documentation.
- Supplier Safety Data Sheets.
- ECHA database.

Note to the reader:

The information provided in this Safety Data Sheet has been prepared in accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). It is recommended that this Safety Data Sheet is carefully studied, and if necessary, consult a specialist in order to understand the data it contains. The information presented herein corresponds to the present state of our knowledge and is offered in good faith. Nevertheless, the purpose of this SDS is purely informative; it makes no implicit or explicit warranty or guarantee about the properties of the product.

The information provided in this SDS should be considered as a starting point for a comprehensive health and safety program in your company, if you need further information about the product to conduct your risk assessment, please contact us and we will try to assist you as much as possible.