

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

### 1.1. Product identifier

Product form : Mixture  
Name : NHDeltaK  
Product code  
Type of product : Fertiliser.

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

#### 1.2.1. Relevant identified uses

Main use category : Professional use  
Industrial/Professional use spec : Agricultural use.  
For professional use only

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Ecoculture Biosciences SL  
Rambla Obispo Orberá 11 1º4  
Almería  
España  
T +34 950 264981  
[info@ecoculturebs.com](mailto:info@ecoculturebs.com) [www.ecoculturebs.com](http://www.ecoculturebs.com)

### 1.4. Emergency telephone number

Emergency number +34 950 264981  
Office hours

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Not classified

### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

No labelling applicable

#### 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

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH Annex II

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- |                                       |  |
|---------------------------------------|--|
| First-aid measures general            | : The person performing first aid must apply self-protection. Artificial respiration if indicated. Never give anything by mouth to an unconscious person. Do not leave affected people without supervision. If you feel unwell, seek medical advice (show the label where possible). |
| First-aid measures after inhalation   | : Allow affected person to breathe fresh air. Allow the victim to rest.  |
| First-aid measures after skin contact | : Wash with water and soap. If skin irritation occurs: Get medical advice/attention.   |
| First-aid measures after eye contact  | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.   |

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Give water to drink if victim completely conscious/alert. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician if you feel unwell. Get emergency medical advice if swallowed more than a small amount.

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

Symptoms/effects : Inhalation of dusts, fumes, gases, mists & vapours from a fire or decomposition may have corrosive effects on the respiratory system. These symptoms may be delayed.

Symptoms/effects after eye contact : May cause slight irritation.

Symptoms/effects after ingestion : May cause irritation to the digestive tract.

### 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 : Spray water is the most suitable medium because it is useful to cool structures and vessels containing the chemical, to protect the fire brigade, to bring down dusts, fumes, gases, mists & vapours, and finally to extinguish the fire.

Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable. Not combustible. No oxidising.

Explosion hazard : Not explosive.

Hazardous decomposition products in case of fire : Under fire conditions, hazardous fumes will be present. At high temperatures may form: Ammonia. Nitrogen oxides. etc...

### 5.3. Advice for firefighters

Precautionary measures fire : Exercise caution when fighting any chemical fire. Do not allow to enter drains or be confined.

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter the danger zone without proper protective equipment, including respiratory protection. In case of fire, use: Self-contained breathing apparatus.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with skin and eyes.

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Keep the product away from incompatible substances, organic materials and combustible materials.

### 6.2. Environmental precautions

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

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Pick it up immediately using mechanical means, if possible by pumping. Dilute the remains and neutralise them, e.g, by using soda ash or calcium carbonate. Do not absorb in sawdust, paper, cloth or other combustible absorbents. Store away from other materials. Collect all waste in suitable and labelled containers and dispose according to local legislation.

### 6.4. Reference to other sections

For further information refer to sections 8 and 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Provide good ventilation in process area to prevent formation of vapour. Avoid contamination with combustible materials and other incompatible substances. Clean up the remains & the residues cautiously before performing any maintenance operation. Open and handle container with care, avoiding spills.
- Hygiene measures : Wash hands, forearms and face thoroughly after handling. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container in a cool, well ventilated place away from: Incompatible products, Heat sources, Sources of ignition, Open flame. Keep container closed when not in use. Keep away from food, drink and animal feeding stuffs.
- Incompatible products : Alkalis. Strong bases. Hypochlorites. Lye. Strong acids. Reducing agents. organic materials. combustible materials. Sulfur. Metal powders and the substances containing metals such as copper, nickel, cobalt, zinc and their alloys. Strong oxidizing agents. Chlorates. Chromates. Nitrites. Permanganates.
- Storage temperature : 5 – 30 °C (recommended)
- Packaging materials : Stainless steel. High Density Polyethylene (HDPE). Fiber reinforced polyester (FRP). Do not store in corrodable metal.

### 7.3. Specific end use(s)

See section 1.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

No additional information available

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according to Regulation (EC) No. 1907/2006 (REACH)

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

<b>Potassium nitrate (7757-79-1)</b>	
<b>DNEL/DMEL (Workers)</b>	
Long-term - systemic effects, dermal	20.8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	36.7 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	12.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	10.9 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	12.5 mg/kg bodyweight/day
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0.45 mg/l
PNEC aqua (marine water)	0.045 mg/l
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	18 mg/l

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Apply commons safety rules for chemicals handling. Safety showers and emergency eye wash fountains should be available in storage and handling areas. Take off immediately all contaminated clothing.

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### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Wear recommended personal protective equipment. Avoid all unnecessary exposure.

#### Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

##### Eye protection:

Safety goggles with side protection against splashes (UNE-EN 166:2002)

#### 8.2.2.2. Skin protection

##### Skin and body protection:

Safety toe footwear

##### Hand protection:

Wear suitable gloves resistant to chemical penetration.

#### 8.2.2.3. Respiratory protection

##### Respiratory protection:

In case of insufficient ventilation or if the occupational exposure limit is exceeded, wear suitable respiratory equipment.

#### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Other information:

Do not eat, drink or smoke during use. Keep away from food, drink and animal feeding stuffs.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Opaque.
Colour	: Green.
Odour	: Characteristic.
Odour threshold	: No data available

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pH	: 3 – 4
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: < 5 °C (crystallization)
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour Pressure 20°C	: No data available
Vapour density	: No data available
Relative density	: 1.18 – 1.19
Solubility	: soluble in water.
Partition coefficient n- octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not explosive.
Oxidising properties	: Not classified oxidizer, although it has associated nitrate chemical group that has oxidizing properties and supports combustion.
Explosive limits	: Not applicable

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable (in terms of reactivity hazards) under recommended storage & use conditions (see Section 7).  
Acidic behaviour: may react violently with alkalis & bases (neutralisation reaction).

### 10.2. Chemical stability

Stable (in terms of chemical stability) under recommended storage & use conditions (see Section 7).

### 10.3. Possibility of hazardous reactions

If coming into contact with incompatible materials or when a strong heating leads to its decomposition. Acidic behaviour: may react violently with alkalis & bases (neutralisation reaction). May release flammable hydrogen in contact with metals.

### 10.4. Conditions to avoid

Extremely high or low temperatures. Heat sources. Sources of ignition. Open flame. Proximity or contamination with incompatible substances. Heating under confinement.

### 10.5. Incompatible materials

Alkalis. Strong bases. Hypochlorites. Lye. Strong acids. Reducing agents. organic materials. Combustible materials. Sulfur. Metal powders and the substances containing metals such as copper, nickel, cobalt, zinc and their alloys. Strong oxidizers. Chlorates. Chromates. Nitrites. Permanganates.

### 10.6. Hazardous decomposition products

Under fire conditions, hazardous fumes will be present. At high temperatures may form: Ammonia. Nitrogen oxides. etc...

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Additional information	: Based on available data, the classification criteria are not met.
Skin corrosion/irritation	: Not classified pH: 3 – 4
Additional information	: Based on available data, the classification criteria are not met.
Serious eye damage/irritation	: Not classified pH: 3 – 4
Additional information	: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met.
Reproductive toxicity	: Not classified

Additional information	: Based on available data, the classification criteria are not met.
STOT-single exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met.
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met.
Other information	: This product has not been tested. The hazard assessment has been made based on the properties of its components

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: This product has not been tested. The hazard assessment has been made based on the properties of its components. 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
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

### 12.2. Persistence and degradability

NK 15-7 fertilizer solution	
Persistence and degradability	The ingredients dissociate in water. Ions resulting from this dissociation are nutrients of plant & microorganisms, so easily consumed by living organisms of the environment. Nitrogen follows the natural cycle of nitrification / denitrification.

### 12.3. Bioaccumulative potential

NK 15-7 fertilizer solution	
Bioaccumulative potential	None of the ingredients has evidence of bioaccumulation potential. The ingredients dissociate in water into ions which are normal constituents of the body in virtually all forms of life.

### 12.4. Mobility in soil

NK 15-7 fertilizer solution	
Ecology - soil	The mixture is a fertiliser intended for use in agriculture, water soluble, so that its mobility in soil is pretty high.

### 12.5. Results of PBT and vPvB assessment

NK 15-7 fertilizer solution	
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

Additional information : An uncontrolled fertilisation can cause eutrophication and pollution by nitrates. When handled properly, according to instructions for use, it is considered unlikely to occur adverse effects on the environment. The mixture should be handled with appropriate precautions for chemicals.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to appropriate collection point. Contact an appropriate entity (Public Administration or Authorized Waste Manager) for information on your particular case. Contaminated packaging material should be treated same as the residuals.

Additional information : When totally empty and free of residues, containers are recyclable like any other packing.

Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / IMDG / RID

ADR	IMDG	RID
<b>14.1. UN number</b>		
Not applicable	Not applicable	Not applicable

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ADR	IMDG	RID
<b>14.2. UN proper shipping name</b>		
Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>		
Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>		
Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>		
Not applicable	Not applicable	Not applicable
No supplementary information available		

### 14.6. Special precautions for user

#### Overland transport

Not applicable

#### Transport by sea

Not applicable

#### Rail transport

Not applicable

### 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

###### REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(b)		Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

###### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

###### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

###### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

###### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

###### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

###### Explosives Precursors Regulation (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 to the relevant national contact point within 24 hours.

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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

Please see [https://ec.europa.eu/home-affairs/system/files/2021-11/list\\_of\\_competent\\_authorities\\_and\\_national\\_contact\\_points\\_en.pdf](https://ec.europa.eu/home-affairs/system/files/2021-11/list_of_competent_authorities_and_national_contact_points_en.pdf)

### Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

For this mixture a chemical safety assessment has not been carried out.

## SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Supersedes	Added	
	Revision date	Added	
	Type of product	Modified	
1.1	Product code	Modified	
7.2	Storage temperature	Added	
8.2	Skin and body protection	Modified	

### Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road

Abbreviations and acronyms:	
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
vPvB	Very Persistent and Very Bioaccumulative
LD50	Median lethal dose
LC50	Median lethal concentration
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant

### Data sources

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Royal Decree 506/2013, of June 28, on fertilizer products (BOE No. 164 of 07/10/2013), and subsequent amendments (Spanish regulation concerning commerce of fertilisers). Regulation (EU) 2019/1009 of the European Parliament and of the Council of 5 June 2019 laying down rules on the making available on the market of EU fertilising products and amending Regulations (EC) no 1069/2009 and (EC) no 1107/2009 and repealing Regulation (EC) No 2003/2003 (OJEU N° 170 of 06/25/2019), and its subsequent modifications and adaptations to the technical progress.

Safety Data Sheet (SDS), EU

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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.