according to Regulation (EC) No. 1907/2006 (REACH) regulation (EU) No 453/2010 and regulation (EC) No 830/2015



Version: 1.1 Revision date: 14/09/2017

Date of previous issue:

# Fertilizer NutrActive bor 21-7-11+10SO<sub>3</sub>+0,3B

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Commercial Product Name : Fertilizer NutrActive bor 21-7-11+10SO<sub>3</sub>+0,3B

Product code: : ---

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

**Use of the Substance/Mixture**: Fertilizer. For consumers and professional users.

1.3 Details of the supplier of the safety data sheet

**Company (Distributor)** : HELLAGROLIP SA

Pentelis 34A

175 64, Palaio Faliro

e-mail: g.director@hellagrolip.com

www.hellagrolip.com

**Telephone** : +30 2510 317127 και +30 2130 037616

**Fax** : +30 210 9408198

1.4 Emergency telephone number

In case of medical emergencies, please contact your local poison control center. Company's Telephone: +30 2510 317127 και +30 2130 037616 (08:30 to 16:30)

# **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1 Classification of the substance or mixture

# Classification (REGULATION (EC) No 1272/2008) - CLP

Eye Irrit. 2 H319: Causes serious eye irritation.

Aquatic Chronic 3 H412: Harmful to aquatic life with long lasting effects.

# 2.2 Label elements CLP

**Hazard pictograms:** 



Signal word

Warning

**Hazard Statements:** 

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

**Precautionary Statements:** 

General:

P101: If medical advice is needed, have product container or label at

hand.

P102: Keep out of reach of children.

according to Regulation (EC) No. 1907/2006 (REACH) regulation (EU) No 453/2010 and regulation (EC) No 830/2015



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Prevention

P280: Wear protective gloves/protective clothing/eye protection/face

protection.

Response:

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

rinsing.

Storage:

---

**Disposal** 

P501: Dispose of contents/container to local/regional/national/international

regulations.

Hazardous components which must be listed on the label:

Ammonium nitrate

2.3 Other hazards

None known.

# SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Mixtures

Classified components according to EU Chemicals Legislation:

	CAS No			
Chemical name	EINECS No	Classification (1272/2008/EC)	Concentration [%]	
	Registration No	(1212/2000/20)	[ ,0]	
Ammonium nitrate	6484-52-2		42 %	
	229-347-8	Ox. Sol. 2, H272		
	01-2119490981-27- XXXX	Eye Irrit. 2, H319		
Magnesium Nitrate	10377-60-3		2 %	
	233-826-7	Ox. Sol. 2, H272		
	01-2119491164-38- XXXX	Eye Irrit. 2, H319	2 /6	

#### **Further information**

If inhaled

The components in this formulation do not meet the criteria for classification according to Regulation (EC) No. 1907/2006 as PBT or vPvB. For the full text of the H-Statements mentioned in this Section, see Section 16.

# **SECTION 4: FIRST AID MEASURES**

# 4.1 Description of first aid measures

General advice : In

: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Take off contaminated clothing and shoes immediately.

Take on contaminated doubling and shoes infinediate

: Avoid dust formation during use.
Inhalation of dust may cause irritation of the respiratory

system.

In case of respiratory tract irritation, consult a physician.

In case of skin contact : After contact with skin, first remove product with a dry

cloth and then wash the skin with plenty of water.

Take off immediately all contaminated clothing and wash it

before reuse.

according to Regulation (EC) No. 1907/2006 (REACH) regulation (EU) No 453/2010 and regulation (EC) No 830/2015



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In case of eye contact

: In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids open.

If swallowed

: Typically no exposure pathway. If accidentally swallowed, rinse the mouth with plenty of water (only if the person is conscious) and ask immediately for medical help.

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

Symptoms upon:

Inhalation: Cough, Headache, Sore throat

Skin contact: Redness

**Eye contact:** Causes serious eye irritation.

Ingestion: Abdominal pain, Convulsions, Diarrhoea, Dizziness, Vomiting, Weakness

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

Provide symptomatic treatment.

### SECTION 5: FIREFIGHTING MEASURES

## 5.1 Extinguishing media

Suitable extinguishing media : Water, water spray. Unsuitable extinguishing media : Powder, foam or sand.

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

Specific hazards during firefighting

In case of a fire or decomposition involving various nitrogen-based fertilizers, hazardous decomposition products will be formed, such as: irritating, corrosive and/or toxic gases. Exposure to decomposition products may cause serious damage to health.

No action shall be taken involving any personal risk or without suitable training. Keep away all personnel not involved in firefighting team.

Approach the fire from upwind to avoid exposure to toxic fumes.

If it is possible move the product containers from the fire area without risk. Use self-contained breathing apparatus when entering fumes.

For cooling of packages that are close to the fire area use: water spray.

#### 5.3 Advice for firefighters

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for incidents with

chemical substances.

**Further information** 

Attention! The product contains oxidizing agent at a rate below the classification limit (see section 3), which may intensify fire.

Fire residues and contaminated fire extinguishing water

according to Regulation (EC) No. 1907/2006 (REACH) regulation (EU) No 453/2010 and regulation (EC) No 830/2015



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must be disposed of in accordance with local authority requirements.

# SECTION 6: ACCIDENTAL RELEASE MEASURES

# 6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

Avoid inhalation of dust. Ensure sufficient ventilation especially in enclosed spaces.

Eliminate all ignition sources. Keep all unnecessary personnel away. Wear gloves and overalls. Do not touch or walk through spilt material.

## 6.2 Environmental precautions

Heavy spillage may cause adverse environmental impact in surface waters, such as eutrophication or contamination by nitrates. In case of contamination of rivers and lakes or drains, inform respective authorities.

Create mounds with suitable materials e.g. sand, to prevent molten ammonium nitrate from entering the drains.

## 6.3 Methods and material for containment and cleaning up

If it is possible stop leak of the product without risk. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

During cleanup, you should wear appropriate PPE, to prevent any skin/eye contact and inhalation of dust. Avoid creating dust during clean-up. Do not use compressed air to clean up spills.

Environmental manager must be informed immediately of all major spillages. Collect the uncontaminated dispersed product with a clean shovel and place the material into a clean, dry container/bag for re-use, ONLY if it is not contaminated by substances such as organic materials, metal powders, compounds containing chlorine and alkalis which may reduce the resistance of AN to explosion. Otherwise, carry out a risk assessment, as the risk depends on the nature and quantity of the contaminant.

Products which are out-of-specification or contaminated by incompatible materials (see 10.5), should be disposed of as hazardous waste according to national regulations.

# 6.4 Reference to other sections

Refer to section: 7, 8, 11, 12 and 13.

# SECTION 7: HANDLING AND STORAGE

# 7.1 Precautions for safe handling

Advice on safe handling

: Avoid eye and excessive skin contact. Use only with adequate ventilation.

Wear personal protection equipment (Refer to section 8). Do not eat, drink or smoke when handling.

Wash hands after handling.

Advice on protection against fire and explosion

: Keep away from heat and sources of ignition - No smoking. The risk of fire (or decomposition) can increase particularly if the product is spilled and contaminated with combustible materials such as coal, grain, sawdust, oil, grease or elemental sulphur.

**Dust explosion class** : Not applicable.

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in accordance with local regulations.

Store away from combustible materials. Handle bags with care. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10).

according to Regulation (EC) No. 1907/2006 (REACH) regulation (EU) No 453/2010 and regulation (EC) No 830/2015



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Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully

resealed and kept upright to prevent leakage.

Separate from reducing agents, combustible or flammable Advice on common storage

Keep away from food, drink and animal feedingstuffs.

**Storage Temperature** Ambient temperature (5 - 30°C).

The product is hygroscopic. Other data

7.3 Specific end use(s)

Fertilizer.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1 Control parameters

Chemical name EINECS	FINECS	CAS-No	Note: (3)	WEL-TWA (4)		WEL-STEL (5)		
				ppm <sup>(6)</sup>	mg/m <sup>3</sup>	ppm <sup>(6)</sup>	mg/m <sup>3</sup>	Source

<sup>(1)</sup> EINECS: European Inventory of Existing Chemical Substances

#### 8.2 Exposure controls

# Appropriate engineering controls

Prevent generation of dust. Provide adequate ventilation in work and storage areas.

# Personal protective equipment

Respiratory protection Special respiratory protection measures are not required

when applied under normal or reasonably foreseeable conditions of use and in a well ventilated area. In case of inadequate ventilation and/or dust formation wear

respiratory protection.

Recommended: half-mask for dust/particles (EN 149) or half-mask (EN 140) with filter type P1 or FFP1 for dust

(EN 143).

Hand protection

Material Impervious chemical resistant protective gloves (EN 374,

EN 420) and gloves for protection from mechanical risks

(EN 388).

Glove thickness Break through time

General remarks

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation

into account.

Eye/face protection In case of splash risk, wear safety glasses with side-

5/11

<sup>(2)</sup> CAS: Chemical Abstract Service Registry Number.

<sup>(3)</sup> The notation "skin" (D), implies the possibility of a significant absorption through the skin when in direct contact with the substance.

<sup>(4)</sup> WEL-TWA: Workplace Exposure Limit - Time-Weighted Average value of exposure over the course of an 8 hour work shift.

<sup>(5)</sup> WEL-STEL: Workplace Exposure Limit - Short-term exposure limit (15-minute reference period)

<sup>(6)</sup> ppm: parts per million volume in air (ml/m3).

<sup>(7)</sup> mg/m<sup>3</sup>: measured at a temperature of 20 °C and atmospheric pressure (101,3 kPa).

according to Regulation (EC) No. 1907/2006 (REACH) regulation (EU) No 453/2010 and regulation (EC) No 830/2015



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shields conforming to EN166.

Skin and body protection : Choose body protection according to the amount and

concentration of the dangerous substance at the work

place.

<u>Hygiene measures</u>: Recommended protection measures which should be taken

into account, when handling chemicals:

General practical hygiene measures.

Do not breathe vapour /cloud /gas /dust.When using do not eat, drink or smoke.

• Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing. Take off contaminated clothing and wash before reuse.

**Environmental exposure controls** 

General advice : Do not dispose into surface water or sanitary sewer system.

Prevent entry into sewers and waterways, dispose of in accordance with all federal, state and local environmental

regulation.

Prevent further leakage or spillage if possible without risk. If the product contaminates rivers and lakes, inform

respective authorities.

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

9.1 Information on basic physical and chemical properties

Appearance : Solid Colour : Green

Odour : Characteristic

Flash point : The product itself is not combustible

Lower Flammable Limit: No data availableUpper Flammable Limit: No data availableAutoignition temperature: No data available

**Explosive properties** : Ammonium nitrate melts on heating and further heating

can cause decomposition, releasing toxic fumes containing nitrogen oxides. Heating under strong confinement can lead to explosive behaviour. This

product has high resistance to detonation

Lower explosive limit : Not applicable

Upper explosive limit : Not applicable pH (20 °C) : No data available

Boiling point/boiling range (°C): Not applicableVapour pressure: Not applicableDensity: Not applicable

Relative density : Not applicable : No data available

Solubility in water : No data available
Solubility in other solvents : No data available
Partition coefficient n-

octanol/water:

Viscosity, dynamic

: No data available
: Not applicable

according to Regulation (EC) No. 1907/2006 (REACH) regulation (EU) No 453/2010 and regulation (EC) No 830/2015



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Viscosity, kinematic Oxidising properties

- : Not applicable
- : The product contains oxidizing agent at a rate below the classification limit (see section 3), which may intensify

### 9.2 Other information

None known.

### **SECTION 10: STABILITY AND REACTIVITY**

## 10.1 Reactivity

Contamination with incompatible materials such as acids, chromates, chlorinated chemicals and various metals such as zinc and copper and their salts may increase the risk of decomposition.

### 10.2 Chemical stability

The material is stable under normal conditions of use and storage and will not decompose spontaneously. Though, may decompose when heated. The risk of decomposition dependents upon the temperature of the heat source, the duration of exposure to the heat source and the containment of the fertilizer.

# 10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.

#### 10.4 Conditions to avoid

May decompose when heated. Cross-contamination of the fertilizer with other chemicals must be avoided.

### 10.5 Incompatible materials

Materials to avoid: Reducing agents, Powdered metals, Strong acids.

#### 10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products is not possible to be produced. May decompose when heated. Decomposition may release toxic gases such as NOx, N<sub>2</sub>O, ammonia, or nitric acid vapors.

# **SECTION 11: TOXICOLOGICAL INFORMATION**

# 11.1 Information on toxicological effects

## **Dangerous health implications**

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits (see section 8), it may result in adverse effects on health depending on the means of exposure.

#### **11.1.1.** Ingestion:

Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for ingestion (see section 3).

#### 11.1.2. Inhalation:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation (see section 3).

## 11.1.3. Contact with the skin and the eyes:

Causes serious eye irritation. (see section 3).

# 11.1.4. CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned (see section 3).

#### 11.1.5. Respiratory or skin sensitisation:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensibilizing effects (see section 3).

#### 11.1.6. Specific target organ toxicity (STOT)-single exposure:

according to Regulation (EC) No. 1907/2006 (REACH) regulation (EU) No 453/2010 and regulation (EC) No 830/2015



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Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. (see section 3).

## 11.1.7. Specific target organ toxicity (STOT)-repeated exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified, as dangerous for inhalation (see section 3).

### 11.1.8. Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect (see section 3).

Given the available data of the individual components

Acute toxicity (oral)

Ammonium nitrate : LD50 (oral-rat): 2.950 mg/kg (OECD 401)

Magnesium Nitrate : No data available

Acute toxicity (inhalant)

Ammonium nitrate : LC50 (inhalation-rat): 88,8 mg/L

Magnesium Nitrate : No data available

Acute toxicity (dermal)

Ammonium nitrate : LD50 (dermal-rat): > 5.000 mg/kg (OECD 402)

Magnesium Nitrate : No data available

Acute toxicity (other routes of administration)

Ammonium nitrate : No data available Magnesium Nitrate : No data available

Skin corrosion/irritation

Skin irritation

Ammonium nitrate : No data available Magnesium Nitrate : No data available

Serious eye damage/eye irritation

Ammonium nitrate : No data available Magnesium Nitrate : No data available

Respiratory or skin sensitization

Ammonium nitrate : No data available Magnesium Nitrate : No data available

# CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction)

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned (see section 3).

**STOT - single exposure** 

Ammonium nitrate : No data available Magnesium Nitrate : No data available

STOT - repeated exposure

Ammonium nitrate : No data available Magnesium Nitrate : No data available

**Aspiration hazard** 

Aspiration toxicity

Ammonium nitrate : No data available Magnesium Nitrate : No data available

**Neurological effects** 

Ammonium nitrate : No data available Magnesium Nitrate : No data available

**Toxicology Assessment** 

according to Regulation (EC) No. 1907/2006 (REACH) regulation (EU) No 453/2010 and regulation (EC) No 830/2015



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Toxicology, Metabolism, Distribution

No data available

Acute effects

No data available

#### **Further information**

No data available.

## **SECTION 12: ECOLOGICAL INFORMATION**

## 12.1 Toxicity

Toxicity to fish

Ammonium Nitrate : No data available
Magnesium Nitrate : No data available
: No data available

Toxicity to daphnia and other aquatic invertebrates

Ammonium nitrate : EC50 (Daphnia): 490 mg/kg

Magnesium Nitrate : No data available

Toxicity to bacteria:

Ammonium Nitrate : LC50: 1.700 mg/L Magnesium Nitrate : No data available

12.2 Persistence and degradability

<u>Biodegradability</u>: The product is expected to be biodegradable.

12.3 Bioaccumulative potential

<u>Bioaccumulation</u>: No data available

12.4 Mobility in soil

<u>Surface tension</u>: No data available

# 12.5 Results of PBT and vPvB assessment

The product does not meet the criteria for classification as PBT or vPvB.

## 12.6 Other adverse effects

Additional ecological information

: Prevent surface and ground-water infiltration, as well as ground penetration.

## SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

Advice on disposal and packaging : Disposal:

According to National and European regulations. It should not be disposed of with household wastes. The

not be disposed of with household wastes. The appropriate waste code(s) should be assigned by the

user, based on the product usage.

The following Waste Codes are only suggestions:

Waste Code (EWC) : EWC disposal code no. (unused product):

06 10 02 wastes containing dangerous substances

(M) = Mirror entry

Disposal of uncleaned packaging

(EWC)

: EWC disposal code no. (uncleaned packaging):

15 01 10\*(M) packaging containing residues of or

contaminated by dangerous substances

(M) = Mirror entry

Note: After rinsing with plenty of water, empty bags can be

according to Regulation (EC) No. 1907/2006 (REACH) regulation (EU) No 453/2010 and regulation (EC) No 830/2015



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transported to licensed units / management organizations for recycling.

## SECTION 14: TRANSPORT INFORMATION

The product is not subject to international regulations governing the transport of dangerous goods (ADR/RID, IMDG, ICAO/IATA).

# **SECTION 15: REGULATORY INFORMATION**

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

: Not applicable.

Not applicable.

VOC (1999/13/EC)
Seveso III - DIRECTIVE
2012/18/EU OF THE EUROPEAN
PARLIAMENT AND OF THE
COUNCIL on the control of
major-accident hazards involving
dangerous substances

## 15.2 Chemical safety assessment

The Chemical Safety Assessments of the mixture's components have been performed.

#### **SECTION 16: OTHER INFORMATION**

This product is not subject to Regulation (EU) 98/2013, but all suspicious transactions, disappearances and thefts should be reported to the relevant authority

### Full text of H-Statements referred to under sections 2 and 3

H272: May intensify fire; oxidiser.

H302: Harmful if swallowed.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H410: Very toxic to aquatic life with long lasting effects.

H412: Harmful to aquatic life with long lasting effects.

#### **Revised points:**

**SECTION 16** 

#### Acronyms and abbreviations

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road (2015)

CAS No: Chemical Abstracts Service Number

EmS: Emergency Schedules

EINECS No: European Inventory of Existing Commercial Chemical Substances Number GHS: Globally Harmonized System of Classification and Labelling of Chemicals

IATA-DGR: International Air Transport Association's-Dangerous Goods Regulations (56<sup>th</sup> edition)

ICAO-TI: International Civil Aviation Organization's-Technical Instructions

IMDG Code: International Maritime Dangerous Goods Code (36<sup>th</sup> - 37<sup>th</sup> amendment)

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

This Safety Data Sheet was elaborated on the basis of information provided by the manufacturer, as well as, suppliers of individual components and on the basis of data in publicly accessible databases.

All information provided herein is deemed reliable and is intended to ensure optimal protection during transport, handling and storage of our products.

However, the present should not be considered as a warranty or quality specification.

according to Regulation (EC) No. 1907/2006 (REACH) regulation (EU) No 453/2010 and regulation (EC) No 830/2015



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# **Department issuing MSDS:**

HELLAGROLIP SA Pentelis 34A 175 64, Palaio Faliro, Attiki, Greece

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