

INAGROSA
Industrias Agrobiológicas, S.A.

Ciudadela, s/n
28001 Madrid (Spain)
C.Z.P.: 4-129-00014
TEL: +3491439000
+3491439149
FAX: +3491575467
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.

Revision Date: 28-02-2017

FOSNUTREN

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

1.1. Product Identifier.-

| | |
|--------------------|---|
| Trade name | FOSNUTREN |
| Internal code | BIO 102 |
| Product definition | Amino acid mixture enriched with Nitrogen and Phosphorous |
| CE No | Not applicable |
| CAS No | Not applicable |
| REACH or NRN | Not applicable |

1.2. Relevant identified uses of the mixture and uses advised against.-

| | |
|--------------------------|---|
| Relevant identified uses | CE Fertilizer. Nutrient for agricultural use/Bio fertilizer |
| Use advised against | None |

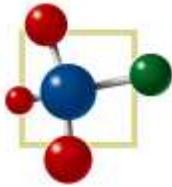
1.3. Information on the supplier of the safety data sheet.-

| | |
|---------|--|
| Company | INDUSTRIAS AGROBIOLÓGICAS, S.A. –INAGROSA |
| Address | C/ Recoletos, 6. 3º. 28001 MADRID-ESPAÑA |
| Tel | (+34) 91.435.90.80/91.49 |
| Fax | (+34) 91.575.54.67 |
| Email | fichasseguridad@inagrosa.es inagrosa@inagrosa.es |

1.4. Emergency telephone numbers

| | |
|---|--|
| Phone number | (+34) 964.24.00.33 |
| Opening hours | Only available during the following office hours: 08.30 to 17.00 h (CET) |
| National Institute of Toxicology (24/7) | (+ 34)91.562.04.20 |
| INAGROSA Transport Dept. | (+ 34)964.56.50.19 |
| Languages | English and Spanish |





INAGROSA
Industrias Agrobiológicas, S.A.

Ciudad de P. Ag.
28001 Madrid (Spain)
C.Z.F. 4-126/0014
TEL: +34914319000
+34902399149
FAX: +34902754487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.

Revision Date: 28-02-2017

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture.-

| | |
|------------------------------------|----------------------|
| Product definition | Mixture |
| Regulation (EC) N° 1272/2008 (CLP) | Not classified |
| GHS/REACH | No hazardous product |

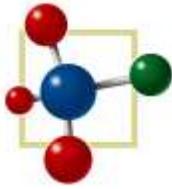
2.2 Label elements

| | |
|-------------------------------------|--|
| According with (EC) 1272/2008 (CLP) | None |
| Hazard pictograms | None |
| Signal word: | None |
| Hazard statements | None |
| Supplemental hazard information | None |
| Precautionary Statements | P102 - Keep out of reach children P401 + P411 - Protect from sunlight. Store at temperatures not exceeding 35°C. Keep/Store away from food, drink and fodder. |

2.3 Other hazards

| | |
|------------|--|
| None known | |
|------------|--|





INAGROSA
Industrias Agrobiológicas, S.A.

Ciudadela, s/n
28001 Madrid (Spain)
C.Z.P.: 4-126-000-14
TEL: +34914319000
+34902399149
FAX: +34902754487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.

Revision Date: 28-02-2017

SECTION 3: COMPOSITION/INFORMATION ON COMPONENTS

3.2 Mixtures

| Ingredient Name | Identifiers | Classification (CLP/GHS) | % Concentration |
|------------------|-------------------------------------|--|-----------------|
| Ammonium Nitrate | N. CAS 6484-52-2 N. EC 229-347-8 | Serious eye damage/eye irritation: Category 2; H272, H319 | 1 ≥ x ≤ 2 |
| Phosphoric Acid | N. CAS 7664-38-2 N. EC 231-633-2 | Skin corrosion/irritation. Category 1B; H314. Serious eye damage/eye irritation: Category 1; H 318 | 4 ≥ x ≤ 5 |

For full text of Hazard–statement, see SECTION 15

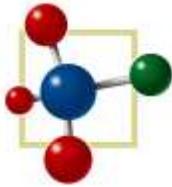
There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Definitions :

N° EC (EU Directive 1831/2003, Feed Additive Register)/EC 1272/2008

N° CAS (Chemical Abstracts Service) Register





INAGROSA
Industrias Agrobiológicas, S.A.

Ciudadela, s/n
28003 Madrid (Spain)
C.Z.P.: 4-126 000 14
TEL: +34914319000
+34902399149
FAX: +34902752487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.

Revision Date: 28-02-2017

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures.

| | |
|-------------------------|---|
| General recommendations | Although there are no foreseeable hazardous effects during use of the mixture, in case of accident, always have the label and/or SDS at hand when contacting a doctor or a poison centre. |
| Inhalation | In case of inhalation, remove victim into fresh air. |
| Ingestion | If the product has been swallowed, induce vomiting. Give plenty of water. Get medical attention. No urgent actions will be required. |
| Skin contact | Rinse the skin with water. Remove the contaminated clothing. Wash the clothing before re-use. Clean the shoes before re-use. |
| Eye contact | Rinse If a high quantity is thrown or poured on eyes, rinse them gently with plenty of water. Remove contact lenses if present and easy to do. Continue rinsing. |
| Note to physician | Treat according to symptoms. No need for specific antidote. |

UNDER NO CIRCUMSTANCES CAN THE PERSON AFFECTED BE LEFT UNATTENDED AND, IF DUE TO THE ALLERGIC CONDITION OF THE PATIENT THE POISONING IS SEVERE, PLEASE CONTACT THE NATIONAL INSTITUTE OF TOXICOLOGY ON Tel 91 562 04 20, OR EMERGENCY PHONES.

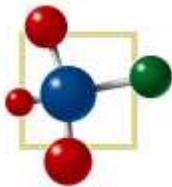
4.2. Most important symptoms and effects, both acute and delayed.

No symptoms or delayed acute effects have been either identified or observed.

4.3. Indication of any immediate medical attention

No indication for immediate medical attention. Treat symptomatically.





INAGROSA
Industrias Agrobiológicas, S.A.

Ciudad de Pío
28001 Madrid (Spain)
C.Z.P.: 4-129 000-14
TEL: +34914319000
+34914319149
FAX: +34914319147
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.

Revision Date: 28-02-2017

SECTION 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

| | | |
|--|--|--|
| | This mixture is not flammable. | |
| | Suitable extinguishing media | Use any means suitable for extinguishing a surrounding fire. |
| | Appropriate means of extinguishing fires | In the first instance, take notice of any available materials (water, etc.) in the surroundings. In case of fire it is recommended to use dry dust, carbon dioxide, water or foam. Water spray may be used to cool of containers exposed to fire'' |
| | Inappropriate means for extinguishing fires: | None known |

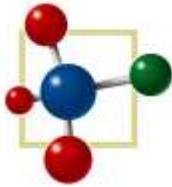
5.2. Specific hazards arising from the mixture.-

| | | |
|--|---|--|
| | Special hazards | The solution must not be allowed to enter into drains. |
| | Thermal decomposition or product combustion hazards | In the case of combustion, the product may emit itching and suffocating fumes or, if it has been mixed with other chemical compounds, toxic and corrosive fumes. |

5.3. Advise for firefighters.-

| | | |
|--|---|--|
| | Specific firefighting methods | The product itself is not flammable. The fire extinguishing measures must be coordinated taking into account local and environmental circumstances. Open doors and windows in the area to give maximum ventilation. Avoid breathing the smoke (toxic). Position yourself upwind of the fire. Avoid any contamination of the product with incompatible materials. |
| | Special protective equipment for firefighting | Use self-contained breathing apparatus in case of smoke. |





INAGROSA
Industrias Agrobiológicas, S.A.

Ciudadela, s/n
28003 Madrid (Spain)
C.Z.P.: 4-126 000 14
TEL: +34914319000
+34902399149
FAX: +34902755487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.

Revision Date: 28-02-2017

SECTION 6: ACCIDENTAL MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Comply with the health and safety policy of the centre, as well as with the safety recommendations, using protective gloves, safety glasses, appropriate clothing and good hygiene practices. Avoid the formation of inhalable spray and dust.

Avoid all contact with the skin. Wear protective gloves, glasses or a facial screen, adequate protective clothing as described in section 8: "Individual Exposure/Protection Controls". Keep away from ignition sources. Evacuate the hazardous area or consult an expert.

Wear protective gloves (nitrile), safety glasses or a facial screen, adequate protective clothing as described in section 8: "Individual Exposure/Protection Controls". Keep away from ignition sources. Evacuate the hazardous area or consult an expert.

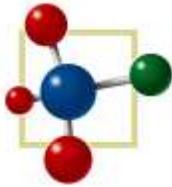
6.2 Environmental precautions:

Take care to prevent contamination of water courses and drains and inform the competent authorities in case of accidental contamination of water courses.

6.3 Methods and material for containment and cleaning up

If practicable, stop flow. Recover liquid when possible. Use absorbent material to collect it (sand, sawdust). Dilute residues with water. Dry and/or allow spill to evaporate





INAGROSA
Industrias Agrobiológicas, S.A.

Ciudad de la Piedad
28001 Madrid (Spain)
C.Z.P.: 4-129 000 14
TEL: +34914319000
+34902399149
FAX: +34902752487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.

Revision Date: 28-02-2017

SECTION 7: HANDLING AND STORAGE

7.1 Personal precautions, protective equipment and emergency procedures

| | |
|--------------------------------------|---|
| Personal protection measures | Comply with all safety recommendations and practices according to the best personal industrial hygiene and working practices by using the appropriate protective gloves, glasses and clothing. There are no specific recommendations if the product is used correctly |
| Precautionary firefighting measures | See Section 5. There are no additional precautionary measures. |
| Environmental protection measures | Always follow the recommended precautions and procedures when using the Product |
| General work hygiene recommendations | Do not smoke, drink or eat in working areas, wash your hands after using the product; clear away all protective clothing and equipment before entering the eating areas |

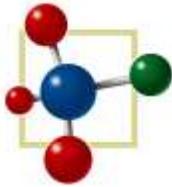
7.2 Conditions for safe storage, including any incompatibilities

| |
|---|
| Store in a cool, dry and well ventilated space. Protect from sunlight. Store the product only in their original containers at temperatures not exceeding 35°C and below 0°C. Keep out of the reach of children and animals. |
|---|

7.3 Specific end uses

| |
|---|
| The only product application is as a fertiliser for soil, foliar or drip irrigation (read product label). |
|---|





INAGROSA
Industrias Agrobiológicas, S.A.

Ciudadela, 1 P.º 1º
28001 Madrid (Spain)
C.Z.P.: 4-126 000 14
TEL: +34914319000
+34902399149
FAX: +34902755487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.

Revision Date: 28-02-2017

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

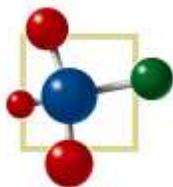
8.1. Control parameters.-

| | |
|---|---|
| Environmental/Airborne limits, TLV value: | No TLV value have been set up |
| Biological Limit Value: | No limit wet up for this mixture(product) |
| Carcinogenicity: | Not listed by IARC, ACGIH, NTP or OSHA as carcinogenic. |

8.2. Exposure controls.-

| | |
|---|---|
| <p>Personal protection measures</p> <p>Respiratory protection</p> <p>Hands</p> <p>Eyes/Face protection</p> <p>Skin and body</p> <p>Hygiene Measures:</p> <p>Recommended monitoring procedures:</p> <p>Environmental exposure controls</p> | <p>All usual precautions in the handling of chemical products must be observed.</p> <p>Wear protective gloves.</p> <p>It is advisable to wear approved chemical protection glasses or a facial screen/full-face shield</p> <p>Wear adequate protective clothing/gloves</p> <p>When using this mixture (product): do not eat, drink or smoke. Wash hands carefully before eating or smoking.</p> <p>Any premises where the product is being stored or used must be adequately ventilated, cool and dry.</p> <p>When the product is being used in powder form it is recommended to do so in a space with forced ventilation system.</p> <p>Comply reasonably with all safety recommendations and practices according to the best personal and occupational hygiene practices by using adequate protective safety gloves, glasses and clothing that completely protects the skin.</p> <p>Use the appropriate ventilation procedures at each step of the process where emissions of vapour or gasses may occur. Ventilate all transport vehicles prior to unloading them.</p> <p>Avoid any possible spillages reaching surface waters or sewers.</p> <p>Use appropriate agricultural practices to minimize ammonia losses due to volatilization. See section 6.</p> |
|---|---|





INAGROSA

Industrias Agrobiológicas, S.A.

Ciudadela, s/n P.º 1º
28003 Madrid (Spain)
C.Z.F. 4-120/0014
TEL: +34914319000
+34902399149
FAX: +34902752487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.

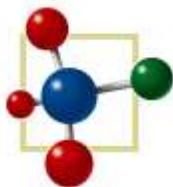
Revision Date: 28-02-2017

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| | |
|---|--|
| Physical state: | Liquid |
| Form: | Liquid |
| Colour: | Dark brown |
| Odour: | Light odour of ammonia /Characteristic of amines |
| Odour threshold: | Not determined |
| pH in 10% solution w/w: | 6.5 to 7 |
| Dry substance: | 9.85 % |
| Melting point/range: | Not determined |
| Freezing point: | - 7,5°C (Freezing point losing Amino Acids its biological activity: -25°C) |
| Boiling point/range: | 115°C |
| Flash point: | Not determined |
| Evaporation rate: | <0.005 m Pa (25°C) |
| Evaporation Index: | NE |
| Combustibility (solid/gas): | Not determined |
| Ignition temperature: | Not auto flammable |
| Lower explosive limit: | It has not been possible to determine it in the experiments |
| Upper explosive limit: | It has not been possible to determine it in the experiments |
| Vapour pressure: | <0.005 m Pa (25° C) |
| Vapour density: | No data available |
| Apparent Density at 20°C | 1.10 |
| Water solubility (20°C in g/100 ml): | Miscible in all proportions in water |
| N-octanol/water partition coefficient: | Log Kow= -2.9; 2.1 (25°C) |
| Self-ignition temperature: | Not self-flammable according to the experiments |
| Thermal decomposition: | Starting at 240 °C |
| Dynamic viscosity: | 52 cP (centipoise) |
| Kinematic viscosity: | Dynamic viscosity/density= 44.82 CST (centistokes) = 0.00004482 m ² /s |
| Explosive properties: | Non explosive |
| Comburent properties: | No data available |
| Oxidizing properties | No data available |
| COEFFICIENT OF SEPARATION FROM WATER AND ORGANIC SOLVENTS: | (N-octanol): Log Kow = -2.9; -2.1 (25 °C) |
| CONSTANT OF DISSOCIATION: | PKa (α-COOH) Min. 1.8 (Histidine); PKa (α- NH ₃ ⁺) Max. 10.8 (Cysteine) |
| | |





INAGROSA
Industrias Agrobiológicas, S.A.

Ciudad de P. Ag.
28001 Madrid (Spain)
C.Z.P. 4-129 000 14
TEL: +34914319000
+34902339149
FAX: +34902752487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.

Revision Date: 28-02-2017

9.2. Additional information

CHEMICAL ANALYSIS

| METHOD | PARAMETER | RESULT | UNITS |
|--------------------------|-------------------------|--------|--------------|
| EPA 160.4 | Total solids | 9.85 | % |
| AOAC 978.02 | Total Nitrogen (N) | 5.03 | % (m/m ssb) |
| AOAC 920.03 | Ammoniacal Nitrogen (N) | 1.79 | % (m/m ssb) |
| AOAC958.01 | Phosphorus (P) | 7.05 | % (m/m P2O5) |
| ATOMIC Absorption | Iron | 5.0 | mg/Kg |
| | Potassium (K) | <5.5 | mg/Kg |
| | Magnesium (Mg) | <3.5 | mg/Kg |
| | Sodium (Na) | 10 | mg/L |
| | Chlorides | <0.15 | % |

Radioactive Carbon C-14 1-1-2006; laboratory tests USDA approved: complies with USDA regulations for the tested product at 90.

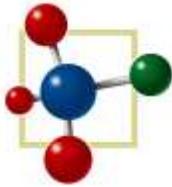
Clean air dilution: VOC is 1.0 g/L meets CAS criteria.

FOR AA ANALISIS: HPLC-FMOC: Perkin Elmer Chromatograph. **Units :** mg/l

| | | | |
|-------------|-----|------------------|-----|
| Glycine: | 800 | Valine: | 40 |
| Proline: | 350 | Hydroxi proline: | 350 |
| Alanine: | 350 | Aspartic Acid: | 680 |
| Arginine: | 30 | Glutamic Acid: | 225 |
| Lysine: | 345 | Leucine: | 50 |
| Isoleucine: | 125 | Phenylalanine: | 145 |
| Methionine: | 25 | Serine: | 140 |

Process: Cell pathway biosynthesis (Cellular biosynthesis – extracellular transcription factors)





INAGROSA
Industrias Agrobiológicas, S.A.

C/Arco de S. Pío
28001 Madrid (Spain)
C.Z.P.: 4-126 000 14
TEL: +34914319000
+34902399149
FAX: +34902755487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

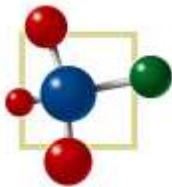
Version 4.1 –This replaces all previous versions.
Revision Date: 28-02-2017

L-amino acids: 100%
Purity > 99.999%
Toxicity: Not toxic

HEAVY METALS (SPECTROPHOTOMETRY OFFICIAL METHODS):

| | | | | | |
|----|-----------|-----------|----|-----------|-----------|
| As | less than | 0.005 ppm | Cd | less than | 0.008 ppm |
| Co | “ | 0.125 ppm | Hg | “ | 0.002 ppm |
| Ni | “ | 0.065 ppm | Pb | “ | 0.202 |
| Cr | “ | 0.417 ppm | | | |





INAGROSA
Industrias Agrobiológicas, S.A.

Ciudad de Pío
28001 Madrid (Spain)
C.Z.P.: 4-126 000 14
TEL: +34914319000
+34902399149
FAX: +34902755487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.

Revision Date: 28-02-2017

SECTION 10: STABILITY AND REACTIVITY

10.1. Personal precautions, protective equipment and emergency procedures Reactivity.-

Stable under the recommended conditions of storage and handling in their closed original container (see section 7).

10.2. Environmental precautions: Chemical stability.-

Stable for a minimum of 2 years under the recommended conditions of storage and handling in their closed original container (see section 7).

10.3. Methods and material for containment and cleaning up Possibility of hazardous reactions.-

No hazardous reaction products may be formed when heated

10.4. Conditions to avoid.-

Avoid thermic shocks because of the possibility of causing crystallisation.

Avoid storage at temperatures above 35°C and below 0°C, because of the difficulty in handling the product due to an increase in viscosity.

With time (>2 years), there is a slight change in the colour and odour, which do not negatively affect the quality of the product.

10.5. Incompatible materials.-

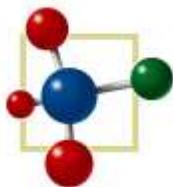
Strong oxidising agents, due to the possibility of producing exothermic reactions.

10.6. Hazardous decomposition products.-

Thermal decomposition will not happen if stored and handled under the normal storage conditions as prescribed.

Hazardous polymerization will not occur.





INAGROSA
Industrias Agrobiológicas, S.A.

Ciudad de P. Ag.
28001 Madrid (Spain)
C.Z.F. 4-129 000 14
TEL: +34914319000
+34902399149
FAX: +34902752487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.

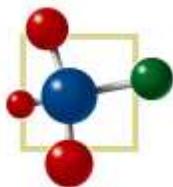
Revision Date: 28-02-2017

SECCIÓN 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

| | |
|--|---|
| <p>The product is neither dangerous, toxic, nor harmful, therefore it does not have toxicological effects.</p> <p>Toxicological tests on the active matter FACE, the basis of the bio-stimulant properties of the range of INAGROSA products (NATURCARE, AMINOL-FORTE, FORNUTREN, KADOSTIM and HUMIFORTE), manufactured using the said active material, and that are also referred to with identification codes ULC-87, NOMAR-200 and ALEC-28 showed that:</p> | |
| In vitro: | No damage, toxicity or genotoxicity were observed. |
| In vivo: | No toxic effects were observed in oral, intramuscular, intravenous or subcutaneous administration tests on mice, rats, beagles, carried out under international regulations and standardisation protocols for toxicity tests. Therefore the product has been classified as having "low toxicity". Doses of up to 4000 mg/Kg administered by mouth did not show any effect on organs such as the brain, liver, spleen, etc., Calculations of LD50 oral or intravenous acute toxicity in mice and rats were above 2000 mg/Kg. |
| LD 50 oral(rat) : | Amino Acid complex, not greater than 2000 mg/kg. Classified the mixture and complex as "low oral toxicity". |
| LD 50 oral(mouse): | Amino acid complex not greater than 2000 mg/Kg. Classified the mixture and complex as "Low oral toxicity" |
| Oral(gavage) administration to CD rats for 4 weeks: | No dead was occurred. No LD 50 found (LSR, UK-Toxicological Studies 1991) |
| Oral (capsules) administration to beagle dogs for 4 weeks | Amino acid complexes up to 2500 mg/Kg/day did not elicit evidence of toxicity. No death. Amino acid and mixture classified as "low toxicity" |
| Mutagenicity: | Not mutagenic or neoplastic |
| Carcinogenicity: | Not carcinogenic |
| Reproductive toxicity: | No Evidence in animals |
| Teratogenicity: | Not Teratogenic |





SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.

Revision Date: 28-02-2017

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity.-

Environmental effects: this product has not harmful effects on the environment. It is an environmentally friendly product. When the product is released into the soil, it improves the fertility of the soil. This product has a short persistence in the soil.

- Environmental toxicity: none known.
- Acute toxicity to fish: no negative effect has been observed in spawn, young fish, sturgeon larva Daphnia Magna): Amino Acid complex LC50>3000mg/L. Rostov Institute. Ex USSR.1990.
- Chronic toxicity to fish (spawn, young fish, fish eggs and sturgeon larvae Daphnia Magna): Amino Acid complex no negative effects have been observed. LDO>2344 mg/L; LD100>3000 mg/L (Rostov Institute. 1990).
- Toxic effect on algae: Amino acid complex nor mixture no growth inhibition observed
- Toxic effects on soil organisms: Amino acids complex nor mixture, no toxic effects observed
- Toxic effects on birds: Amino acid complex no toxic effects to birds
- Toxic effects on pollinating insects: Amino Acids complex no acute toxicity to bees (LD50 bees> 1000 mg/bee (no deaths)
- Chemical content: it contains no Class I or Class II substances that may damage the Ozone layer, defined by 40CFR82 equal to or greater than 1% Wt.
- Eco-toxicology (Summary. For further information, request the complete study from the manufacturer):
LD50 quail > 3.000 mg/kg (no deaths). No toxic.
LC50 trout/salmon > 3.000 mg/kg (no deaths). No toxic

12.2 Persistence and degradability.-

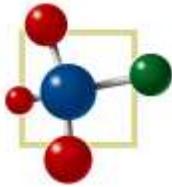
The product is biodegradable in aerobic conditions and the persistence in leaves or in soil is short. The amino acids complex in the soil are digested very fast by the micro flora. The biotic degradation produces more simple metabolites, which are involved in the biochemical processes of live cells and therefore the product is completely biodegradable.

12.3 Bio-accumulation potential.-

Since the substance contains free amino acids and oligopeptides obtained by cellular biosynthesis and not by the hydrosylation of proteins, they are metabolised in the soil very quickly by the microflora and the fauna or absorbed by leaves. They remain in the environment for a very short period showing no tendency to the bioaccumulation.

The NPK contents, in relative small percentages are transported by amino acids and do not accumulate in the soil.





INAGROSA
Industrias Agrobiológicas, S.A.

C/Arco de S. P. Abad
28001 Madrid (Spain)
C.Z.P.: 4-126 000 14
TEL: +34914319000
+34902399149
FAX: +34902755487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

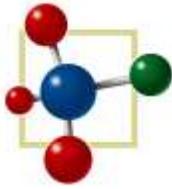
In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.
Revision Date: 28-02-2017

| | |
|--|---|
| | |
| | 12.4 Mobility in soil.- |
| | <p>The mobility of the product in the soil is very high since it contains free amino acids and oligopeptides obtained by cellular biosynthesis and not by protein hydrolysis, thus being absorbed very quickly and metabolised by microorganisms in the soil.</p> <p>According to experiments carried out using rigorous methodology, it is due to this fact that even if the product is spilled on the soil in large quantities, it does not contaminate either the surface water or groundwater.</p> <p>The NPK contents, in relatively small percentages, are transported by the amino acids and do not accumulate in the soil</p> |
| | 12.5 Other adverse effects.- |
| | No evidence |
| | 12.6 Additional Information- |
| | For the complete study to request it to the manufacturer |





INAGROSA
Industrias Agrobiológicas, S.A.

Ciudad de P. Ag.
28003 Madrid (Spain)
C.Z.F. 4-120 000 14
TEL: +34914319000
+34902339149
FAX: +34902752487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.

Revision Date: 28-02-2017

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Do not contaminate the water, fodder, food or seeds during the disposal of the waste. The open dumping and burning of this product in their containers is strictly forbidden.

Given that the acceptable disposal methods and legal requirements may vary in different countries, the relevant official authorities must be contacted prior to the disposal.

In the case of spillage see section 6.

Do not dump in residual waters

13.2 Container management

Rinse each used container thoroughly three times, pouring the rinsing water into the sprayer tank. The empty container is a hazardous residue, which the user is therefore obliged to take it to the reception point of the integrated management system SIGFITO – only in SPAIN -.

European/Spanish directives relating to this section on the disposal of waste:

2001/573 EC, Decision issued by the Council dated 23 July 2001, which modifies Directive 75/442 EC relating to waste.

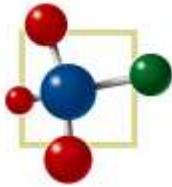
Directive 94/62/EC issued by the European Parliament and the Council dated 20 December 1994, relating to packaging and packaging waste.

In Spain:

11/1997 Act dated 24 April, approving the regulation for the development and implementation of the 11/1997 Act on Packaging and packaging waste. Published in BOE 01/05/1998

MO issued by MAM7304/2002 dated 08 February by which the evaluation and disposal of waste operations and the European waste list were circulated. Published in BOE 19/02/2002





INAGROSA
Industrias Agrobiológicas, S.A.

Ciudadela, s/n
28003 Madrid (Spain)
C.Z.P.: 4-129 000 14
TEL: +34914319000
+34902399149
FAX: +34902755487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

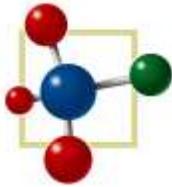
In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.
Revision Date: 28-02-2017

| SECTION 14: TRANSPORT INFORMATION | | | |
|--|--------------------------|----------------------------------|--------------------------|
| 14.1 UN number | | | |
| | (ADR/RID) by road | (IMDG) by water on vessel | (IATA-DGR) by air |
| | not applicable | not applicable | not applicable |
| 14.2 United Nations official transport designation: | | | |
| | (ADR/RID) by road | (IMDG) by water on vessel | (IATA-DGR) by air |
| | not applicable | not applicable | not applicable |
| 14.3 Transport hazard class (es): | | | |
| | (ADR/RID) by road | (IMDG) by water on vessel | (IATA-DGR) by air |
| | not applicable | not applicable | not applicable |
| 14.4 Packaging group: | | | |
| | (ADR/RID) by road | (IMDG) by water on vessel | (IATA-DGR) by air |
| | Group III | Group III | Group III |
| 14.5 Environmental hazards: | | | |
| | (ADR/RID) by road | (IMDG) by water on vessel | (IATA-DGR) by air |
| | not applicable | not applicable | not applicable |
| 14.6 Special precautions for user.- | | | |
| | None. | | |





INAGROSA
Industrias Agrobiológicas, S.A.

Ciudad de P. Ag.
28003 Madrid (Spain)
C.Z.F. 4-126 000 14
TEL: +34914319000
+34902339149
FAX: +34902752487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.
Revision Date: 28-02-2017

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health & environmental regulations/legislations specific for the mixture Regulation EC 1907/2006 (REACH).-

| | |
|---|----------------|
| Candidate List- Substances of Very High Concern: | Not applicable |
| Annex XIV -Substances subject to authorization: | Not applicable |
| Annex XVII - Substances subject to authorization: | Not applicable |

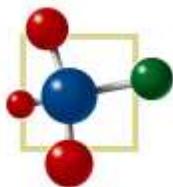
15.2 Chemical safety assessment.-

A chemical safety report has been carried out.

15.3 GHS hazard statement meanings:

| | |
|-------------|---|
| H272 | May intensify fire; oxidizer |
| H301 | Toxic if swallowed |
| H314 | Causes severe skin burns and eye damage |
| H318 | Causes serious eye damage; |
| H319 | Causes severe eye irritation |
| H402 | Harmful to aquatic life. |





INAGROSA

Industrias Agrobiológicas, S.A.

Ciudadela, s/n
28003 Madrid (Spain)
C.Z.P.: 4-126 000 14
TEL: +34914319000
+34902399149
FAX: +34902754487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.

Revision Date: 28-02-2017

SECTION 16: OTHER INFORMATION

NFPA Ratings: Not found
Product use: Agriculture

Methods for the evaluation of the information referred to in article 9 of the Regulation (EC) N° 1272/2008 used for classification purposes:

Classification based on studies and tests on the active substance and mixture product.

16.1 Chemical safety assessment.-

Full forms of abbreviations

| | |
|------------------|---|
| ADR: | European Agreement Concerning the International Carriage of Dangerous Goods by Road |
| IMDG: | International Maritime Code for Dangerous Goods. |
| LC50: | Lethal Concentration, 50% |
| ED50: | Effective Dose, 50% |
| LD50: | Lethal Dose, 50% |
| RID: | Regulations concerning the International Carriage of Dangerous Goods by Rail. |
| IATA-DGR: | International Air Transport Association-Dangerous Goods Regulation. |
| GHS: | Globally Harmonised System of Classification and Labelling of Chemicals |
| OSHA: | Occupancy Security & Health Agency-USA |
| FRC: | Federal Regulation Code-USA |
| PEL: | Permissible Exposure Limit |
| WHMIS: | Hazardous Materials Information System |
| CAS: | Chemical Abstract Service |
| VOC: | Volatile Organic Cleaner |
| STEL: | Short Term Exposure Limit |
| TWA: | Time Weighted Average |
| TLV: | Threshold Limit Value |
| NTP: | National Toxicology Programme-USA |
| CLP: | Classification Labelling and Packaging |

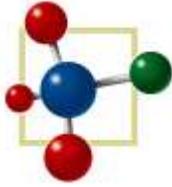
DISCLAIMER:

The information provided in the Safety Information Sheet is the most up-to-date at the time of its publication. The information given is intended only as a safety guide in the handling, use, processing, storing, transport, disposal and release of the product it describes and it must not be considered as a quality guarantee or specification. The information refers only to the specified material and may not be valid for the said material when used in conjunction either with any other substances or processes, unless indicated in the text.

Changes since the last version have been highlighted at the margin if they refer to important safety information, otherwise they are not highlighted.

This SDS version 4.0 of date 01/02/2017. This version updates and replaces all previous versions. Adaptation to the Globally Harmonized System of Classification and Labelling of Chemicals.





INAGROSA
Industrias Agrobiológicas, S.A.

Ciudad de P. Ag.
28003 Madrid (Spain)
C.Z.P.: 4-126 000 14
TEL: +34914319000
+34902399149
FAX: +34902755487
email: inagrosa@inagrosa.es
web: www.inagrosa.es

SAFETY DATA SHEET INFORMATION

In accordance with Regulation (EC) N° 1272/2008 and
ECHA Version 3.0 Dec. 2015;GHS/REACH (EC) 453/2010

FOSNUTREN

Version 4.1 –This replaces all previous versions.

Revision Date: 28-02-2017

The product names are registered brands of **INDUSTRIAS AGROBIOLOGICAS, S.A. – INAGROSA**

Carlos Fernandez Ubide

Manufacturing & Production Department
INAGROSA

Herrero, 30- CASTELLÓN-VALENCIA (SPAIN).

Ph. +34 964 565019 +34 964 24 00 33

inagrosacastellon@inagrosa.es

fab-inagrosa@inagrosa.es

