

## SAFETY DATA SHEET

According to Regulation (EC) N° 1907/2006

Creation	24/10/2019
Update	22/09/2022
Version	4

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

#### 1.1. Product identifier

*Product type:* Mixture  
*Commercial name:* AGROCEAN LAMINA FeMn - GEOCEANE FeMn  
*Commercial code(s):* VAGFEMN - LAMINAFEMN5F - GEOFEMN5F

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

*Relevant identified uses of the substance or mixture:*

Fertilizer

*Uses advised against:* all other use

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

AGRIMER  
Prad Menan - CS 2003  
29880 PLOUGUERNEAU - France  
Tel : +33 2 98 04 54 11  
[contact@agrimer.com](mailto:contact@agrimer.com)

#### 1.4. Emergency telephone number

*France :*

ORFILA number: +33 1 45 42 59 59, gives access to the poison control centers phone numbers.

*Other EU countries:*

The emergency telephone numbers are available on the European Chemical Agency (ECHA) website in Help section and National helpdesk tab:

<http://echa.europa.eu/web/guest/support/helpdesks/national-helpdesks/list-of-national-helpdesks>

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### SECTION 2. HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

**Classification according to Regulation (EC) N°1272/2008 (CLP):**

Product is not classified according to CLP regulation

#### 2.2. Label elements

**Labelling according to Regulation (EC) N°1272/2008 (CLP):**

**Hazard pictograms:**

-

**Signal word:**

Product is not subject to labeling according to CLP regulation

**Hazard statements:**

-

**Precautionary statements:**

P102: Keep out of reach of children . P270: Do not eat, drink or smoke when handling this product . P401: Storage: Keep away from food, drink and animal feed . P501: Dispose of contents/container in accordance with applicable regulations.

#### 2.3. Other hazards

The product does not contain SVHC >= 0.1% published by ECHA according to REACH regulation, article 57:

<http://echa.europa.eu/fr/candidate-list-table>

The product does not contain substance >= 0,1% meeting the criteria for PBT or vPvB according to REACH regulation (EC) n° 1907/2006, annex XIII.

The product does not contain substance >= 0,1% included in the list established in accordance with REACH regulation (EC) n° 1907/2006, Article 59(1) for having endocrine disrupting properties.

The product does not contain substance >= 0,1% identified as having endocrine disrupting properties in accordance with the criteria set out in Delegated Regulation (EU) 2017/2100 setting out scientific criteria for the determination of endocrine-disrupting properties pursuant or Regulation (EU) 2018/605 amending Annex II to Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market and repealing by setting out scientific criteria for the determination of endocrine disrupting properties.

No particular hazards known, if instructions / indications for storage and handling are followed.

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### SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### 3.2. Mixtures

##### *Classified substances:*

Solution of manganese chelated by EDTA, iron chelated by EDTA and laminaria based biostimulant. Contains no substance classified according to the criteria of Regulation (EC) No.1272/2008 (CLP). Contains no substance with an occupational exposure limit value.

### SECTION 4. FIRST AID MEASURES

#### 4.1. Description of first aid measures

Remove contaminated clothing immediately. First aiders have to pay attention to self-protection. As a general rule, in case of doubt or if symptoms persist, always call a doctor.

##### *Following inhalation:*

Remove casualty to fresh air and keep at rest. Seek medical attention in the event of respiratory problems.

##### *Following skin contact:*

Wash with water and soap. Seek medical attention in the event of persistent irritation.

##### *Following eye contact:*

Rinse immediately with water for at least 15 minutes with the eyelids open. Remove contact lenses. Seek medical attention in the event of persistent irritation, redness or visual discomfort.

##### *Following ingestion:*

Do not drink. Do not induce vomiting. Rinse mouth with water if the person is conscious and keep at rest. Call a doctor or antipoison center.

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

No data available. Not considered as hazardous in normal conditions of use.

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

Treat symptomatically, no data available on specific treatment.

### SECTION 5. FIREFIGHTING MEASURES

#### 5.1. Extinguishing media

##### *Suitable extinguishing media:*

All extinguishing media can be used

##### *Unsuitable extinguishing media:*

None

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

Combustion releases carbon oxides, nitrogen oxides and smoke. Do not inhale smoke.

### 5.3. Advice for fire-fighters

Wear self-contained breathing apparatus and protective clothing.

Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure there are sufficient retaining facilities for water used to extinguish fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

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

Wear personal protective equipment to avoid any contact with skin, eyes or personal clothes. See section 8.

### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

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

Contain spills with non combustible absorbent materials such as sand, diatomaceous earth in suitable and tightly closed containers for disposal.

### 6.4. Reference to other sections

See section 8 for information on personal protective equipment and section 13 for disposal information.

## SECTION 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Do not eat, drink or smoke in work area. Wash hands after each use. Strictly follow the directions of use.

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

Keep in the original container tightly closed. Keep at temperature between 5°C and 35°C, away from light and moisture.

### 7.3. Specific end use(s)

Uses: see point 1.2. and observe instructions for use

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### SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### 8.1. Control parameters

Data on main components:

##### *Workplace Exposure Limits (WEL):*

Does not contain substances with occupational exposure limits values

##### *Derived No Effect Level (DNEL):*

##### *Dipotassium salt of EDTA manganese complex (CAS 68015-77-0)*

###### *. Worker - long term exposure*

Systemic effects (cutaneous contact):	25000 mg/kg bw/day
Systemic effects (inhalation):	10 mg/m <sup>3</sup>

###### *. General population - long term exposure*

Systemic effects (cutaneous contact):	12500 mg/kg bw/day
Systemic effects (inhalation):	3 mg/m <sup>3</sup>
Systemic effects (oral):	2,5 mg/kg bw/day

##### *Diammonium salt of EDTA iron complex (CAS 68413-60-5)*

###### *. Worker - long term exposure*

Systemic effects (cutaneous contact):	3960 mg/kg bw/day
Systemic effects (inhalation):	2 mg/m <sup>3</sup>

###### *. General population - long term exposure*

Systemic effects (cutaneous contact):	1980 mg/kg bw/day
Systemic effects (inhalation):	0,47 mg/m <sup>3</sup>
Systemic effects (oral):	0,4 mg/kg bw/day

##### *Predicted No Effect Concentration (PNEC):*

##### *Dipotassium salt of EDTA manganese complex (CAS 68015-77-0)*

Fresh water:	3,13 mg/L
Marine water:	0,31 mg/L
Fresh water sediment:	/
Marine water sediment:	/
Water intermittent release:	1,16 mg/L
Seawage treatment plant:	69 mg/L
Soil:	0,225 mg/kg

##### *Diammonium salt of EDTA iron complex (CAS 68413-60-5)*

Fresh water:	2,9 mg/L
Marine water:	0,29 mg/L
Fresh water sediment:	/
Marine water sediment:	/
Water intermittent release:	0,95 mg/L
Seawage treatment plant:	60,4 mg/L
Soil:	/

#### 8.2. Exposure controls

##### *Appropriate engineering controls*

No data

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### *Individual protection measures, such as personal protective equipment*

#### *Eye/face protection*

Wear eye glasses with side protection.

#### *Skin and body protection*

Wear clean and properly maintained working clothes.

#### *Hand protection*

Wear suitable protective gloves in case of prolonged or repeated contact with skin.

#### *Respiratory protection*

No individual respiratory protective equipment is necessary.

#### *Hygienic measures*

Wash hands after handling product. Do not eat, drink or smoke in the working area.

### *Environmental exposure controls*

Avoid any direct spillage in drainage systems, surface water and drains. Do not allow to enter into soil/subsoil

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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

<i>Physical state</i>	Liquide
<i>Colour</i>	Dark red
<i>Odour</i>	Characteristic
<i>Melting point/freezing point</i>	Not determined
<i>Initial boiling point and boiling range</i>	Not determined
<i>Flammability</i>	Not flammable
<i>Lower and upper explosion limit</i>	Not determined
<i>Flash point</i>	Not determined
<i>Auto-ignition temperature</i>	Not determined
<i>Decomposition temperature</i>	Not determined
<i>pH</i>	7,0 - 8,5
<i>Kinematic viscosity</i>	Not determined
<i>Solubility</i>	Soluble in water
<i>Partition coefficient n-octanol/water (log value)</i>	Not determined
<i>Vapour pressure</i>	Not determined
<i>Density and/or relative density</i>	1,240 - 1,265
<i>Relative vapour density</i>	Not determined
<i>Particle characteristics</i>	Not applicable

### 9.2. Other information

No data

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### SECTION 10. STABILITY AND REACTIVITY

#### 10.1. Reactivity

No data available

#### 10.2. Chemical stability

Product is stable under normal conditions of use and storage

#### 10.3. Possibility of hazardous reactions

None to our best knowledge

#### 10.4. Conditions to avoid

Heat, moisture and light

#### 10.5. Incompatible materials

No data available

#### 10.6. Hazardous decomposition products

No data available

### SECTION 11. TOXICOLOGICAL INFORMATION

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

No data available on mixture. Data on main components:

*Dipotassium salt of EDTA manganese complex (CAS 68015-77-0)*

##### ACUTE TOXICITY

Oral: LD50 > 2000 mg/kg bw (OECD 423)  
Dermal: LD50 > 2000 mg/kg bw (OECD 402)  
Inhalation: LC50 > 5,16 mg/L (OECD 436)

##### IRRITATION / CORROSION

Skin: not irritating (OECD 404)  
Eye: not irritating (OECD 405)

##### SENSITISATION

Skin: not sensitising (OECD 429)  
Respiratory: /

##### CMR

Carcinogenicity: no adverse effect observed (rat)  
Mutagenicity: no adverse effect observed (OECD 476 ; OECD 474)  
Toxicity to reproduction: no adverse effect observed (OECD 415)  
Teratogenicity: no adverse effect observed (OECD 414)

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### TARGET ORGANS TOXICITY

Single exposure: not classified

Repeated exposure: not classified

### ASPIRATION HAZARD

not classified

### REPEATED DOSE TOXICITY

Oral: NOAEL > 500 mg/kg bw/day (OECD 408)

Dermal: /

Inhalation: NOAEC = 420 mg/m<sup>3</sup>

*Diammonium salt of EDTA iron complex (CAS 68413-60-5)*

### ACUTE TOXICITY

Oral: LD50 > 2000 mg/kg bw (OECD 423)

Dermal: LD50 > 2000mg/kg bw (OECD 402)

Inhalation: LC50 > 2.75 mg/L (OECD 403)

### IRRITATION / CORROSION

Skin: not irritating (OECD 404)

Eye: not irritating (OECD 405)

### SENSITISATION

Skin: not sensitising (OECD 429)

Respiratory: /

### CMR

Carcinogenicity: no adverse effect observed (rat)

Mutagenicity: no adverse effect observed (OECD 471 ; OECD 474)

Toxicity to reproduction: no adverse effect observed (OECD 415)

Teratogenicity: no adverse effect observed (OECD 414)

### TARGET ORGANS TOXICITY

Single exposure: not classified

Repeated exposure: not classified

### ASPIRATION HAZARD

not classified

### REPEATED DOSE TOXICITY

Oral: NOAEL > 84 mg/kg bw/day (OECD 407)

Dermal: /

Inhalation: NOAEL = 420 mg/m<sup>3</sup>

## 11.2. Information on other hazards

### Endocrine disrupting properties

No data available

### Other information

No data available



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### SECTION 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

No data available on mixture. Data on main components:

##### *Dipotassium salt of EDTA manganese complex (CAS 68015-77-0)*

###### *FISH*

Short-term toxicity: LC50 = 2,634 g/L (96h ; OECD 203)  
Long-term toxicity: NOEC = 25,7 mg/L (35 days ; Danio rerio)

###### *AQUATIC INVERTEBRATES*

Short-term toxicity: EC50 = 115,9 mg/L (48h ; Daphnia magna)  
Long-term toxicity: NOEC = 397 mg/L (21j ; OECD 211)

###### *AQUATIC ALGAE AND CYANOBACTERIA:*

EC50 = 703,2 mg/L (72h ; OECD 201)

###### *MICROORGANISMS:*

NOEC = 694 mg/L (3h ; OECD 209)

##### *Diammonium salt of EDTA iron complex (CAS 68413-60-5)*

###### *FISH*

Short-term toxicity: LC50 = 208 mg/L (96h ; Pimephales promelas)  
Long-term toxicity: NOEC > 27,3 mg/L (OECD 210)

###### *AQUATIC INVERTEBRATES*

Short-term toxicity: EC50 = 95 mg/L (OECD 202)  
Long-term toxicity: NOEC = 29 mg/L (21j ; Daphnia magna)

###### *AQUATIC ALGAE AND CYANOBACTERIA:*

EC50 > 82 mg/L (72h ; Scenedesmus subspicatus)

###### *MICROORGANISMS:*

NOEC = 604 mg/L (OECD 209)

#### 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

The product does not contain substance  $\geq 0,1\%$  meeting the criteria for PBT or vPvB according to REACH regulation (EC) n° 1907/2006, annex XIII.

#### 12.6 Endocrine disrupting properties

No data available

#### 12.7 Other adverse effects

No data available

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### SECTION 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

##### *Product*

Disposal of this product should be in accordance with local and national legislation. Avoid any direct spillage in drainage systems, surface water and drains. Do not allow to enter into soil/subsoil.

##### *Contaminated packagings*

Remaining contents should be emptied and carried out by an authorized waste management company for recycling or disposal

### SECTION 14. TRANSPORT INFORMATION

#### 14.1. UN number or ID number

Not regulated

#### 14.2 UN proper shipping name

Not regulated

#### 14.3 Transport hazard class(es)

Not regulated

#### 14.4 Packing group

Not regulated

#### 14.5 Environmental hazards

Not regulated

#### 14.6 Special precautions for user

No complementary information available

#### 14.7 Maritime transport in bulk according to IMO instruments

Not regulated

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### SECTION 15. REGULATORY INFORMATION

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

Regulation (EC) n° 1907/2006 (REACH)

Regulation (EC) n° 1272/2008 (CLP)

SVHC substances:

The product does not contain SVHC  $\geq$  0.1% published by ECHA according to REACH regulation, article 57:  
<http://echa.europa.eu/fr/candidate-list-table>

#### 15.2. Chemical safety assessment

Information not available

### SECTION 16. OTHER INFORMATION

Safety data sheet based on the legal provisions of Regulation (EC) N° 1907/2006 of the European Parliament and of the Council of 18 December 2006 (REACH), annex II

Abbreviations list:

CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging of substances and mixtures
CMR	Substances classified as Carcinogenic, Mutagenic, or toxic for Reproduction
DNEL	Derived No Effect Level
EC	European Community
ECHA	European Chemical Agency
EU	European Union
IMO	International Maritime Organization
PBT	Persistent, Bioaccumulative and Toxic substances
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and restriction of Chemicals
STEL	Short-Term Exposure Limit
SVHC	Substance of Very High Concern
TWA	Time Weighted Average
UN	the United Nations
vPvB	very Persistent and very Bio-accumulative substances
WEL	Workplace Exposure Limits

This safety data sheet completes the instructions of use but does not replace them. This data is based on the current knowledge relative to the product up to this data. We will not assume any responsibility and will expressly disclaim any liability for any use of the product other than the one for which this product is designed.

The regulatory data given in this safety data sheet is meant to help the user to fulfil regulatory obligations, however.

Compliance with all applicable federal, state, and local laws and regulations remains the responsibility of the user.

This safety data sheet cannot cover all possible situations that the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary.

All health and safety information contained in this bulletin should be provided to your employees or customers. It is your responsibility to develop appropriate work practice guidelines and employee training programs for your operation.

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