

## SAFETY DATA SHEET

According to Regulation (EC) N° 1907/2006

Creation	28/10/2019
Update	03/03/2020
Version	2

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

#### 1.1. Product identifier

**Product type:** Mixture  
**Commercial name:** AGROCEAN LAMINAMNZN - GEOCEANE MNZN  
**Product code:** ME3AGROMNZN - ME3AGROLAMINAMNZN5 - ME3GEOMNZN5

#### 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  
Fax : +33 2 98 04 55 11

#### 1.4. Emergency telephone number

**France :**

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

**Other UE 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>

## SECTION 2. HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

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

Serious eye damage/eye irritation (Eye Dam. 1)  
Specific target organ toxicity after repeated exposure (STOT RE 2)  
Hazardous to the aquatic environment (Aquatic Chronic 2)

### 2.2. Label elements

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

**Hazard pictograms:**



**Signal word:**

Danger

**Hazard statements:**

H318: Causes serious eye damage  
H373: May cause damage to organs through prolonged or repeated exposure  
H411: Toxic to aquatic life with long lasting effects

**Precautionary statements:**

P280: Wear protective gloves/ protective clothing/eye protection/face protection  
P305 + P351 + P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310: Immediately call a POISON CENTER or doctor or ophtalmic emergencies

P260: Do not breathe mist/vapours/spray  
P314: Get medical advice/ attention if you feel unwell  
P273: Avoid release to the environment  
P391: Collect spillage  
P501: Dispose of contents/ container according to regulation

### 2.3. Other hazards

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

Product does not meet criteria for PBT or vPvB mixtures according to REACH regulation (EC) n° 1907/2006, annex XIII.

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:*

<i>Substance / CAS / n° EC / Index / REACH</i>	<i>%</i>	<i>Substance classification</i>
Zinc sulphate heptahydrate CAS: 7446-20-0 EC n°: 231-793-3 REACH: 01-2119474684-27 INDEX: 030-006-00-9	10-20%	Acute Tox. 4 oral ; H302 Eye Dam. 1 ; H318 Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410
Manganese sulphate monohydrate CAS: 10034-96-5 EC n°: 232-089-9 REACH: 01-2119456624-35 INDEX: 025-003-00-4	10-20%	Eye Dam. 1 ; H318 STOT RE 2 ; H373 Aquatic Chronic 2 ; H411

##### *Other non classified substances:*

Water ; Laminaria ; Xanthan gum

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### 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

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

Combustion releases carbon monoxide, carbon dioxide 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.

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### 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 components:

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

##### *Manganese sulphate monohydrate (10-20%)*

UE TWA : 0,2 mg/m<sup>3</sup> (Inhalable fraction, Mn)  
TWA : 0,05 mg/m<sup>3</sup> (Respirable fraction, Mn)

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

##### *Zinc sulphate heptahydrate (10-20%)*

###### *. Worker - long term exposition*

Systemic effects (cutaneous contact): 8,3 mg/kg bw/day

Systemic effects (inhalation): 2,5 mg/m<sup>3</sup>

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

Systemic effects (cutaneous contact): 8,3 mg/kg bw/day

Systemic effects (inhalation): 1,25 mg/m<sup>3</sup>

Systemic effects (oral): 0,83 mg/kg bw/day

##### *Manganese sulphate monohydrate (10-20%)*

###### *. Worker - long term exposition*

Systemic effects (cutaneous contact): 0,004 mg/kg bw/day

Systemic effects (inhalation): 0,2 mg/m<sup>3</sup>

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

Systemic effects (cutaneous contact): 0,002 mg/kg bw/day

Systemic effects (inhalation): 0,043 mg/m<sup>3</sup>

Systemic effects (oral): /

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

##### *Zinc sulphate heptahydrate (10-20%)*

Fresh water: 20,6 µg/L

Marine water: 6,1 µg/L

Fresh water sediment: 117,8 mg/kg

Marine water sediment: 56,5 mg/kg

Water intermittent release: /

Seawage treatment plant: 100 µg/L

Soil: 35,6 mg/kg

##### *Manganese sulphate monohydrate (10-20%)*

Fresh water: 0,0128 mg/L

Marine water: 0,0004 mg/L

Fresh water sediment: 0,011 mg/kg

Marine water sediment: 0,001 mg/kg

Water intermittent release: 0,03 mg/L

Seawage treatment plant: 56 mg/L

Soil: 25,1 mg/kg

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### 8.2. Exposure controls

#### *Respiratory protection*

No individual respiratory protective equipment is necessary.

#### *Hand protection*

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

#### *Eye protection*

Wear eye glasses with side protection.

#### *Skin and body protection*

Wear clean and properly maintained working clothes.

#### *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

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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

<i>Colour</i>	conform / standard
<i>pH (20°C)</i>	4,500 - 5,500
<i>Density (hydrometer) 20°C</i>	1,244 - 1,280
<i>Particle size (refused at 280 µm)</i>	absence of crystals/lumps
<i>Manganese (Mn)</i>	4,600 - 5,400 %
<i>Zinc (Zn)</i>	3,100 - 3,900 %

#### 9.2. Other information

No data

### 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



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### SECTION 11. TOXICOLOGICAL INFORMATION

#### 11.1. Informations on toxicological effects

No data available on mixture. Data on components:

##### *Zinc sulphate heptahydrate (10-20%)*

###### **ACUTE TOXICITY**

Oral: LD50 = 1570 mg/kg bw (OECD 401)  
Dermal: LD50 > 2000 mg/kg bw (OECD 402)  
Inhalation: /

###### **IRRITATION / CORROSION**

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

###### **SENSITISATION**

Skin: not sensitising (LLNA)  
Respiratory: not sensitising

###### **REPEATED DOSE TOXICITY**

Oral: NOAEL = 13,3 mg Zn/kg bw/day (OECD 408)  
Dermal: /  
Inhalation: /

###### **CMR**

Carcinogenicity: not classified  
Mutagenicity: not classified  
Toxicity to reproduction: not classified  
Teratogenicity: not classified

##### *Manganese sulphate monohydrate (10-20%)*

###### **ACUTE TOXICITY**

Oral: LD50 = 2150 mg/kg bw (experimental study, rat)  
Dermal: /  
Inhalation: LC50 > 4,45 mg/L (OECD 403)

###### **IRRITATION / CORROSION**

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

###### **SENSITISATION**

Skin: not sensitising  
Respiratory: /

###### **REPEATED DOSE TOXICITY**

Presumed risk of serious effects for organs after repeated exposure or long-lasting exposure

Oral: NOAEL = 200 mg/kg bw/day (experimental study, rat)  
Dermal: /  
Inhalation: /

###### **CMR**

Carcinogenicity: not classified  
Mutagenicity: not classified  
Toxicity to reproduction: not classified  
Teratogenicity: not classified

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### SECTION 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

No data available on mixture. Data on components:

##### *Zinc sulphate heptahydrate (10-20%)*

###### *FISH*

Short-term toxicity: LC50 = 0,3 mg/L (96h ; Pimephales promelas)

Long-term toxicity: /

###### *AQUATIC INVERTEBRATES*

Short-term toxicity: EC50 = 0,1 mg/L (48h ; Daphnia magna)

Long-term toxicity: /

*AQUATIC ALGAE AND CYANOBACTERIA:* /

*MICROORGANISMS:* /

##### *Manganese sulphate monohydrate (10-20%)*

###### *FISH*

Short-term toxicity: LC50 = 14,5 mg Mn/L (96h ; OECD 203)

Long-term toxicity: /

###### *AQUATIC INVERTEBRATES*

Short-term toxicity: LC50 = 3mg Mn/L (96h ; Hyallela azteca)

Long-term toxicity: /

*AQUATIC ALGAE AND CYANOBACTERIA:* EC50 = 61 mg/L (72h ; OECD 201)

*MICROORGANISMS:* EC50 > 1000mg/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

Product does not meet criteria for PBT or vPvB mixtures according to REACH regulation (EC) n° 1907/2006, annex XIII.

#### 12.6 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

3082

#### 14.2 UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction mass / otne multiconstituent)

#### 14.3 Transport hazard class(es)

ADR / RID: 9

Class	Code	Group	Label	Ident.	QL	EQ	Cat.	Tunnel
9	M6	III	9	90	5L	E1	3	-

IMDG: 9

Class	Groupe	QL	FS	EQ
9	III	5L	F-A, S-F	E1

#### 14.4 Packing group

III

#### 14.5 Environmental hazards

Hazardous for environment according to ADR: yes

Hazardous for environment according to RID: yes

Marine pollutant according to IMDG: yes

#### 14.6 Special precautions for user

No complementary information available

#### 14.7 Transport in bulk according to annex II of MARPOL and the IBC code

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:

Product does not contain SVHC >= 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

Hazard statements in section 2 and 3:

H302: Harmful if swallowed

H318: Causes serious eye damage

H373: May cause damage to organs through prolonged or repeated exposure

H400: Very toxic to aquatic life

H410: Very toxic to aquatic life with long lasting effects

H411: Toxic to aquatic life with long lasting effects

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.