

SAFETY DATA SHEET

In compliance with EC Regulation No. 1907/2006 Up-dated on : 16/05/2014 – Version : 2.0

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1.1. Product identification

AGROCEAN MG BIO

1.2. Relevant identified uses of the substance or mixture Algae based fertilizer

1.3 Data relative to supplier of Safety data sheet

AGRIMER Prat Menan - BP 29 29880 PLOUGUERNEAU - FRANCE Tel : (33) 02 98 04 54 11 Fax : (33) 02 98 04 55 15

1.4. Emergency phone numbers :

Orfilla France (INRS) : + 33 (0)1 45 42 59 59 Centre Anti–Poison (Rennes) : + 33 (0)2 99 59 22 22

SECTION 2 – HAZARD IDENTIFICATION

2.1. Classification of substance or mixture According to EC Directive 67/548/EC or EC Directive 1999/45/EC: none According to EC Regulation 1272/2008 : none

2.2. Labeling elements

Hazard pictogram: none Hazard statement: none Precautionary statements : P102 : Keep out of reach of children P103 : Read label before use P501 : Dispose of contents / container in accordance with local/regional/ national/ international regulations

2.3. Other hazards :

No further relevant information

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Components with hazard statements : Component Classification according to Classification according Composition **Classification of** EC Regulation 1272/2008 to EC Directive mixture 67/548/EEC or EC Directive 1999/45/EC Monohydrated citric acid Eye irrit. 2 H319 Xi, R36 < 0.05% No N° CAS : 201-069-1 REACH: 01-2119457026-42-0008

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FDSME3ALGABION	MGVRAC AGR	OCEAN MG BIO		Page 2/6
Sodium Benzoate N°EINECS: 208-534-8 N° CAS: 532-32-1 REACH:01- 2119460683-35	Eye Irrit. 2 H319	Xi, R36	< 0.6%	No
Other component Laminaria digita Magnesium sulfa	ta extract			
	SECTION 4	– FIRST AID MEA	SURES	
4.1. Description of first a In case of :	nid measures			
 Inhalation: not sp Eyes: rinse imme Skin: remove soi redness. 	becifically concerned (ac idiately and abundantly led clothes, rinse abund mouth with water. Consu	with water for 15 minutes of 15 minutes.	ites, and consult a Consult a doctor in	1 0
4.2. Most important sym			,	
Depending on the type of			vomiting, diarrhe	a
4.3. Indication of any im No further relevant inforn		special treatment ne	eded	
	SECTION 5 – J	FIRE FIGHTING M	EASURES	
water spray, alco Specific hazards separately and eli		oxic fumes. Collect co plicable regulation		02, extinguishing powder, tinguishing water
5.2. Specific hazards aris No further information av oxides.			nay contain sulfur	oxides and nitrogen
5.3. Advice for firefighte Do not enter or stay in haz		ptective clothing and a	utonomous breathi	ng equipment
	SECTION 6 – ACC	IDENTAL RELEAS	E MEASURES	
6.1. Personal precaution Avoid contact with eyes a				
6.2. Environmental pred Contain spills. Do not reje authorities of any spills.		n the natural environm	ent (surface or gro	undwater). Inform
6.3. Methods and materi Do not dilute. Absorb with liquid bindin Do not refill original pack	g material. Dispose con		waste according to	item 13.
6.4. Reference to other s See section 8 for informat See section 13 for disposa	ion on personal protecti	ve equipment		

7.1. Precautions for safe handling

Handling : use a chemical protection mask, rubber or latex gloves, protective eyewear Avoid spilling and accidental projections. Avoid contact with skin and eyes. Do not breathe vapors. Do not eat, smoke or drink in work area. Wash hands before breaks and after using product.

7.2. Conditions for safe storage, including incompatibilities

Storage: in closed container, away from heat or freezing temperatures. Do not store close to food products or drinks, including animal feed. Stacking of pallets must be limited to 2 pallets. Container: 1000 liter tank, 5 or 10 liter tank. Do not transfer to other containers. Keep product in original container, well closed and with original labeling.

7.3. Specific end uses

No further relevant information available

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Advice for the workplace : work outdoors or insure a good ventilation/exhaustion at the workplace Limit values for monitoring at the workplace : no studies have been carried out on the mixture

Components with limit values to be monitored in the workplace :

Sodium benzoate (<0.6%):

DNEL Worker, Inhalation, Long-term Exposure, local effects = 10.4 mg/m³ DNEL Worker, Skin, Long-term Exposure, local effects = 34.7 mg/kg bw/day

8.2. Exposure controls

Monitoring means : occupational health services

Protective equipment

Breathing equipment : P2 filter against aerosols

Protection of skin: gloves resistant against chemicals. Protective clothing (plastic sleeve covers, apron, gloves with sleeve covers, single use suits...) depending on use

Protection of eyes : protective eyewear

Specific hygiene measures: wash hands after handling product. Do not eat, smoke or drink during use of product.

Protection of the environment: Empty rinsing water of the original container into the spraying tank of machine for fertilizing.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance :	brown liquid
Odor :	typical
Density	1.240 - 1.255
pH:	4.5 - 5.5
Solubility :	fully miscible
Melting point :	not determined
Boiling point:	not determined
Decomposition temperature :	not determined
Vapor pressure:	not applicable
Danger of explosion :	not applicable
Combustive properties :	not applicable

9.2. Other information

No further relevant information available

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SECTEUR 10 - STABILITY AND REACTIVITY

10.1 Reactivity

No available data (no particular risks expected)

10.2 Chemical stability

The product is stable in the normal conditions of use. The product may change colors in time, without alteration of its properties.

10.3 Possibility of hazardous reactions

No available data (no particular risks expected)

10.4 Conditions to avoid

Storage at temperatures above 40 °C and below -10°C

10.5 Incompatible materials

Do not store in metal containers

10.6 Hazardous decomposition products

No dangerous decomposition products known. In case of fire, see section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

11.1 Information relative to toxicological effects

No tests carried out on mixture

Acute toxicity : not classified

Data relatives to components : Sodium benzoate (<0.6%): Ingestion: LD 50 > 3140 mg/kg/rat Skin administration (rabbit) : LD50 > 2000 mg/kg Inhalation (rat) : LC50 = 12.2 mg/l/4h Monohydrated citric acid (<0.05%): DL50 Oral (mouse) = 5400 mg/kg DL50 Oral (rat) = 3000 mg/kg

Chronic toxicity : not classified <u>Monohydrated citric acid (<0.05%):</u> NOAEL Oral (rat) = 1200 mg/kg 2 years

Irritation : not classified <u>Monohydrated citric acid (<0.05%):</u> Eyes (rabbit) : severe irritation Skin (rabbit) : slightly irritating

Sensitization : no sensitizing effects known Carcinogenic properties : no available data for mixture

Mutagenicity : no available data for mixture <u>Monohydrated citric acid (<0.05%):</u> In vivo (mammal) : Negative

Toxicity for reproduction : no available data for mixture

SECTION 12 – ECOLOGICAL INFORMATION

12.1 Toxicity

No studies have been carried out for the mixture.

Components :

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 $\frac{\text{Monohydrated citric acid (<0.05\%):}}{\text{CE50 Daphnies} = 120 \text{ mg/l} - 72 \text{ h}}$ $\frac{\text{CE50 Bacteria (Pseudomonas putida) > 100000 \text{ mg/l} - 16 \text{ h}}{\text{CL50 Fish (Leuciscus idus)} = 440 \text{ to } 760 \text{ mg/l} - 96 \text{ h}}$ $\frac{\text{Sodium benzoate (<0.6\%):}}{\text{CL50 Fish > 100 mg/l} - 96\text{h}}$ $\frac{\text{CE50 Daphnies (Daphnia magna) > 100 mg/l - 48\text{h}}}{\text{CE50 Algae > 100 mg/l} - 72\text{h}}$

12.2 Persistence and degradability

No negative impact expected on wastewater treatment plant. All components are degradable or biodegradable. **12.3 Bioaccumulative potential 12.4 Mobility in soil** All components are soluble in water **12.5 Results of PBT and vPvB assessments** Not applicable **12.6 Other adverse effects**

No further relevant information

SECTION 13 – DISPOSAL CONSIDERATIONS

13.1 Waste treatment method

Residues: Must be disposed according to applicable regulations.

Must not be disposed in sewage system.

Destruction of packaging: Eliminate cardboard, pallets, containers according to applicable regulation. Recommended cleaning agent: Empty rinsing water of the original container into the spraying tank of machine for fertilizing.

SECTION 14 - TRANSPORT INFORMATION

14.1. UN number : not regulated

14.2 UN shipping name : not regulated

14.3 Transport hazard class :

Road (ADR 2011) : not regulated

Maritime (IDMG 2011) : not regulated

14.4 Packing group : not regulated

14.5 Environmental hazards : not regulated

14.6 Specific precautions by the user : no further information available

14.7 Transport of bulk according to annex II of MARPOL 73/78 convention and IBC Code : not applicable

SECTION 15 – REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the substance or mixture : Hazard pictograms : none

Hazard pictograms : none Hazard statements : none

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16 – OTHER INFORMATIONS

The content and the format of the Material Safety Data Sheet comply with EC regulation 1907/2006 and regulation 453/2010. Details of revision : new format Risk phrases in section 2 : none Risk phrases in section 3 : Xi : irritant R36 : Irritating to eyes H319 : Causes serious eye irritation

P102 : Keep out of reach of children

P103 : Read label before use

P501 : Dispose of contents / container in accordance with local/regional/ national/ international regulations

This safety data sheet complements the technical instructions of use. The information is based on the current knowledge relative to the product on the date of the update of the document. The manufacturer will not be held responsible for consequences of the use of the product for uses other than the relevant identified use. This document shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.