

Safety Data Sheet
according 1907/2006/EC (REACH), 2015/830/EU

FloraMato

Date : 01 january 2010

Version No. 2

Review date: 25 Aug 2019

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

Product identifier

1.1 Product name: FLORAMATO

1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the substance or mixture:
FloraMato is a mixture of mineral salts formulated and mixed in proportions that ensure optimal plant nutrition (Plant fertilizer).

Uses advised against:

Any use not specified in this section or in section 7.3

Use Descriptor System (REACH): No data available (not applicable).

1.3 Details of the supplier of the safety data sheet

Supplier identification Général Hydroponics Europe
Address 4, boulevard du Biopole 32500 FLEURANCE
Phone number +33 (0)5 62 06 08 30
E-mail address info@eurohydro.com

1.4 Emergency telephone number

Medical services/
emergency services **15**

Fire and rescue services **18**

Police **17**

1.4 EU Emergency call line **112**

Toxicological Information Centre **01 45 41 59 59**

ORFILA (INRS)
Toxicological Information Centre
South West **05 61 77 74 47**

2 SECTION 2 : HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Reg. 1272/2008/CLP In accordance with Regulation No. 1272/2008 (CLP), the product is not considered dangerous.

Additional information :

Hazards for humans None
Environmental hazards None
Physico-chemical hazards None
Other hazards None

Labelling elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

2.2 Hazard pictograms None
Signal word None
Hazardous substances to be indicated on the label None
Hazard statements H: None
Precautionary statements P: Phrases P
P102 Keep out of reach of children

2.3 Other hazards
Reg. 1272/2008/CLP None

3 SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Non applicable

3.2 Mixtures Name FLORAMATO
A mixture of minerals not containing substances classified as hazardous to health or the environment in accordance with the instructions of Directives 67/548/EEC and/or Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and adaptations).
Composition: FloraMato is a mixture of mineral salts, formulated and mixed in proportions that ensure optimal plant nutrition. The exact nature of the salts and their proportions are a trade secret. However, they are derived from: Potassium nitrate, magnesium sulphate, ammonium nitrate, potassium phosphate.

Chemical name	Concentration (%)	N°CAS
Ammonium nitrate	0-0.5	6484-52-2
Potassium nitrate	5-6	7757-79-1

4 SECTION 4 : FIRST AID MEASURES

No known incidents of damage to persons who have used this product.

However, in case of doubt or if symptoms persist, seek medical attention. Do not give anything by mouth to an unconscious person. The general measures described below should be adopted:

4.1 Description of first aid measures

Following eye contact Do not allow the victim to rub their eyes or keep their eyes closed. Immediately flush eyes, including under the eyelids, with plenty of clean, clear water for at least 15 minutes.
Check if the victim is wearing contact lenses and if so, remove them. Consult a doctor immediately.

Following skin contact	Rinse the irritated area thoroughly with water with soap. Remove contaminated clothing.
Following ingestion	Do not induce vomiting. Rinse the mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Call a doctor if adverse health effects persist or worsen.
Following inhalation	If inhaled, move to fresh air. In case of breathing difficulties, consult a doctor as soon as possible.
Self-protection of the first aider	Depending on the first aid context, wear appropriate protective equipment including a mask or filtered respirator. Always wear protective gloves and a resuscitation mask in case of artificial respiration. Wash hands thoroughly after first aid. If your clothing is contaminated with a chemical substance during first aid administration, change it.
Other information	For further details of first aid administration, including but not limited to more serious health effects, the doctor may consult the Toxicological Information Centre, hotline: see section 1.4

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects:

No known effect / no data are available.

Signs/symptoms of overexposure:

No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Note to the attending physician

Symptomatic treatment required. No special treatment.

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

5 SECTION 5 : FIREFIGHTING MEASURES

Extinguishing media

The product is not flammable. Fire hazard low due to the flammability characteristics of the product under normal storage, handling and use conditions.

5.1

Suitable extinguishing media:

In the event of continued combustion, caused by improper handling, storage or use, the following extinguishing media may be used: carbon dioxide (CO₂), foam, chemical powders, and in the event of a widespread fire, also water spray.

Inappropriate extinguishing media:

In case of fire, do not use: Water jet

5.2 Special hazards arising from the substance or mixture

Hazards due to the substance or mixture:

Given its flammability characteristics, the product does not present a specific risk of fire or explosion under normal storage, handling and use conditions.

Risk related to thermal decomposition products:

A fire in the surrounding area will often produce thick black smoke. Exposure to compositional products may pose health risks. Do not breathe dust, vapours or fumes released by the combustion of the products.

Advice for firefighters

Protective actions to be taken when fighting fires

No specific advice

Appropriate protective equipment

The product is not combustible. In the event of a fire in the surrounding area, appropriate extinguishing media and protective equipment may be used for the other materials present (full

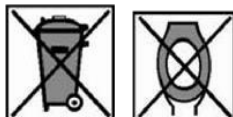
- 5.3** protective clothing and personal respiratory equipment), in accordance with EN469 for a basic level of protection against chemical incidents. Have a minimum of emergency facilities or intervention elements (fire blankets, medicine kit, etc.) in accordance with Directive 89/654/EC.
- Other information** Additional provisions:
Respond in accordance with the Internal Emergency Plan and the Fact Sheets on Accident and Other Emergency Response. Remove all sources of ignition. In case of fire, refrigerate containers and storage tanks for products that may ignite and explode. Avoid spilling products used to extinguish the fire in the aquatic environment.
- 5.4**

6 SECTION 6 : ACCIDENTAL RELEASE MESURES

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel Ensure good ventilation.
In the event of accidental dispersion of a large quantity, evacuate all personnel and allow access only to trained operators with appropriate personal protective equipment. (See section 8)
- For emergency responders Workers will be equipped with appropriate personal protective equipment.
(See section 8)

Environmental precautions



- 6.2** Avoid contamination of soil, sewers, surface water and groundwater. If this happens, inform the competent authorities.

Methods and material for containment and cleaning up

- 6.3** For containment: Sewer coverage
- For cleaning up: Collect the spilled product by mechanical means and remove any residues by water jets. Provide adequate ventilation at the location of the spill. The disposal of the contaminated material must be carried out in accordance with the provisions of point 13.
- Reference to other sections** Collect the remains in an identified container: see point 13 for disposal.
- 6.4** Personal protective equipment: see section 8
Withdrawal considerations: see section 13.
See section 1 for emergency contact information.

7 SECTION 7 : HANDLING AND STORAGE

Precautions for safe handling

- 7.1** Avoid the formation of suspended particles and the dispersion of the product in the air. Use adequate ventilation in areas where suspended particles develop.
Keep away from flames and sparks. Do not smoke. Keep away from heat sources and other sources of fire.
Do not eat, drink or smoke in work areas.
Wash hands after each use.

	Conditions for safe storage, including any incompatibilities	Ensure adequate local ventilation or extraction. Store in a cool, dry place. Keep the container tightly closed in a dry and well-ventilated place.
7.2	Specific end use(s)	Close containers before and after each use to avoid sources of moisture or heat. No specific end uses.
7.3		Good practices: keep in closed containers. Close containers before and after each use to avoid sources of moisture or heat. Store in areas with impermeable pavement.

8 SECTION 8 : EXHIBITION CONTROLS/INDIVIDUAL PROTECTION

8.1	Control parameters	Not applicable
		Follow good industrial hygiene practices.
8.2	Exposure controls	
	Appropriate engineering controls	No particular control. Good general ventilation should be sufficient to control workers' exposure to airborne contaminants.
	Individual protection measures, such as personal protective equipment	No personal protection required. In general, use individual protections placed on the market in accordance with the provisions of Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016. Personal protective equipment must be adapted to the risk, kept clean and properly maintained in accordance with the provisions of the Labour Code.
	Eye/face protection	It is recommended to wear protective glasses in accordance with NF EN166 before handling any chemical products.
	Skin protection	Hands: Wear suitable protective gloves in case of prolonged or repeated contact with the product. Use suitable chemical-resistant protective gloves in accordance with NF EN374.
	Respiratory protection	Ensure adequate ventilation, especially in enclosed areas.
	Body protection	Wear appropriate protective clothing. After contact with the product, all parts of the body that have been in contact with the product must be washed.
	Environmental exposure controls	No data available.

9 SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Physical state: All FloraMato compounds are in aqueous solution (liquid) Color: Pink
Odour	No odor
pH	4
Melting point	Not applicable
Freezing point	Not determined
Initial boiling point and boiling range	Not determined
Flash point	Not determined
Evaporation rate	Not determined
Flammability (solid, gas)	Non inflammable
Upper/lower flammability or explosive limits	Not applicable

Vapour pressure	Not determined
Vapour density	Not determined
Relative density	1.14
Solubility(ies) 20°C	Entirely Soluble
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature	Not determined
Decomposition temperature	Not determined
Viscosity	Not determined
Explosive properties	Not determined
Oxidising properties	Not determined
Refraction index	Not determined
Rotary power	Not determined

9.2

Other information

No other information

10 SECTION 10 : STABILITY AND REACTIVITY

10.1	Reactivity	No specific reactivity test data are available for this product or its components in normal conditions of use.
10.2	Chemical stability	The product is stable at room temperature in closed packages and under normal storage and handling conditions.
10.3	Possibility of hazardous reactions	No risk of dangerous reactions under normal use and storage conditions.
10.4	Conditions to avoid	No special conditions to avoid. Comply with usual precautionary practices regarding chemicals.
10.5	Incompatible materials	FloraMato contains elements that are powerful oxidants that can react with strong bases to release ammonium. It can also react with powerful reducers.
10.6	Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced. At high temperatures, decomposition products are formed: phosphorus oxide, magnesium oxide, potassium oxide(s) and sulphur oxide(s).

11 SECTION 11 : TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

a) acute toxicity;	Most of the chemicals in FloraMato are toxic by ingestion, inhalation or skin contact (mild irritation if exposed to 72 hours of dermal exposure without precaution).
(b) skin corrosion/irritation;	
(c) serious eye damage/irritation;	
(d) respiratory or skin sensitisation;	
(e) germ cell mutagenicity;	
(f) carcinogenicity;	
(g) reproductive toxicity;	
(h) STOT-single exposure;	
(i) STOT-repeated	

exposure; (j) aspiration hazard Information on likely exposure pathways	Ingestion: No known significant effects or critical hazards. Inhalation: No known significant effects or critical hazards. Skin exposure: Slight irritation. No known significant effects or critical hazards. Eye exposure: Slight irritation. No known significant effects or critical hazards.
Symptoms related to the physical, chemical and toxicological characteristics	Non known symptoms
Delayed and immediate effects as well as chronic effects from short- and long- term exposure	No known health effect
Interactive effects	No data available
Absence of specific data	No data available
Mixtures	No data available
Mixture versus substance information	Mixture not containing substances subject to registration. No known adverse effects or symptoms resulting from exposure to the mixture or its components.
Other information	Comply with good industrial hygiene practices

12 SECTION 12 : ECOLOGICAL INFORMATION

12.1 Toxicity	Not applicable
12.2 Persistence and degradability	No data available to date to the best of our knowledge
12.3 Bioaccumulative potential	No data available to date to the best of our knowledge
12.4 Mobility in soil	No data available to date to the best of our knowledge. Waste generation should be avoided or minimized as much as possible, and the product should not be discharged into sewers or waterways.
12.5 Results of PBT and vPvB assessment	No data available to date to the best of our knowledge
12.6 Other adverse effects	No known significant effects or critical hazards.

13 SECTION 13 : DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	FloraMato can be disposed of in the same way as any industrial fertilizer. Recover the product as much as possible. Follow local legislation. Do not discharge into my sewers or waterways. Waste: Waste management is carried out without endangering human health and without harming the environment, including without creating a risk to water, air, soil, fauna and flora. Recycle or dispose of in accordance with current legislation, preferably by an approved collector or company. Disposal of the product/packaging: it is prohibited to discharge it into sewers or waterways. Residues and empty containers must be handled and disposed of in accordance with the relevant local/national legislation in force. Follow the provisions of Directive 2008/98/EC on waste management.
Waste codes / waste designations according to LoW:	Not applicable

14 SECTION 14 : TRANSPORT INFORMATION

Non-hazardous transport. In the event of an accident and product spillage, proceed as described in point 6

14.1	UN number	Not regulated. Non-hazardous transport
14.2	UN proper shipping name	Not regulated. Non-hazardous transport
14.3	Transport hazard class(es)	Not regulated. Non-hazardous transport
	ADR	Not regulated. Non-hazardous transport
	IMDG	
	OACI/IATA	
14.4	Packing group	Not regulated. Non-hazardous transport
14.5	Environmental hazards	Not regulated. Non-hazardous transport
14.6	Special precautions for user	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not regulated. Non-hazardous transport

15 SECTION 15 : REGULATORY INFORMATION

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

15.1	Reg. 1272/2008/CE	The product does not contain substances that can be classified as carcinogenic. 1 or 2 according to Reg.1272/2008/EC and subsequent updates.
	Reg. 830/2015/CE (REACH)	Not applicable
	Special hazards	To our knowledge, no other national or governmental regulations apply.
15.2	Chemical safety assessment	Evaluation not carried out

16 SECTION 16 : OTHER INFORMATION

Abbreviations and acronyms:

16.1	ETA = Acute Toxicity Estimation
	CLP = Regulation 1272/2008/EC on classification, labelling and packaging of substances and mixtures
	DNEL = Derived no-effect dose
	DMEL = Derived no-effect dose
	EUH = Specific hazard statement CLP
	CPSE = Predicted no-effect concentration
	RRN = REACH registration number
	PTB = Persistent, Toxic and Bioaccumulative
	tPtB = Very persistent and very bioaccumulative
	bw = Body mass

Key literature references and sources for data

16.2

Regulation (EC) 1907/2006 of the European Parliament (REACH)
Regulation (EC) 1272/2008 of the European Parliament (CLP)
Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
Regulation (EC) 453/2010 of the European Parliament Regulation (EC) 286/2011 of the European Parliament (II Atp. CLP)
The Merck index. Ed. 10 Handling and chemical safety
Niosh - Register of toxic effects of chemical substances
INRS - Toxicological Data Sheet
Patty - Industrial hygiene and toxicology
N.I. Sax - Dangerous properties of Industrial Materials - 7 Ed., 1989
ECHA website
EU REACH IUCLID5 CSR.
National Institute for Occupational Safety and Health, U.S. Dept. of Health, Education, and Welfare, Reports and Memoranda Registry of Toxic Effects of Chemical Substances.
IHS, 4777 Levy Street, St Laurent, Quebec HAR 2P9, Canada. Règlement (CE) n ° 1272/2008 Annexe VI.

16.3 **Indication of changes:**

Date of revision: 25/08/2019
Previous version date: 01/01/2010
Version: 2

16.4 **Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:
Note**

Compliance with the 16-point standard.
Not applicable, to the best of our knowledge

he indicated mixture does not require an MSDS according to REACH requirements. Form prepared for information purposes.
This safety data sheet complies with the requirements established by Regulation 830/2015/EU. It does not in any way exempt the user from knowing and applying all the documents that govern his activity. The user will take under his responsibility the precautions related to the specific use of the product. All the regulatory requirements mentioned are intended simply to assist the recipient in fulfilling their responsibilities. This list should not be considered exhaustive. This sheet supplements the technical operating instructions but does not replace them. This safety data sheet has been prepared by GHE on the basis of its current knowledge (manufacturer's active ingredient safety data sheet and other bibliographic data).
The information contained herein is based on our knowledge of the product on the date indicated. They are given in good faith. In addition, the user's attention is drawn to the possible risks involved when a product is used for purposes other than those for which it was created. The addressee must ensure that he is not responsible for anything else according to texts other than those mentioned.
The information describes the safety aspects of the product. They are not intended to guarantee specific properties.
It is the responsibility of our customers to comply with the regulations in force.