

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

Maxi Gro

Date : 01 Janvier 2008

Version No. 3

Review date: 05/15/2016

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

Product identifier

1.1 Product name: MAXI GRO

1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the substance or mixture:
Powder. Hydroponic plant nutrient to promote vigorous roots, stems, and foliage.

Uses advised against:

Any use not specified in this section or in section 7.3

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
EU Emergency call line	112
Toxicological Information Centre ORFILA (INRS)	01 45 41 59 59
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
2.3	Other hazards	
	Reg. 1272/2008/CLP	None
	Precautionary statements P	None
	Hazards not otherwise classified (HNOC)	Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat

3 SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Non applicable

3.2 Mixtures Name MAXI GRO

Ingredient name	%	CAS number
Calcium ammonium nitrate	30-60	15245-12-2
Citric Acid	3-5	77-92-9
Cobalt Nitrate	0-0.1	10141-05-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

4 SECTION 4 : FIRST AID MEASURES

4.1 Description of first aid measures

Following eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.
Following skin contact	Flush contaminated skin with plenty of water. Get medical attention if symptoms occur.
Following ingestion	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the

lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Following inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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

Self-protection of the first aider

No action should be taken that involves an individual risk or in the absence of appropriate training. If it is suspected that fumes are present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It can be dangerous for the person assisting a victim to practice mouth-to-mouth. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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:

Eye contact : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Inhalation : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Ingestion : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Signs/symptoms of overexposure:

Eye contact : Adverse symptoms may include the following: pain or irritation watering redness

Inhalation : Adverse symptoms may include the following: respiratory tract irritation coughing

Ingestion : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

4.3 Indication of any immediate medical attention and special treatment needed

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.

No specific treatment.

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.

Suitable extinguishing media:

5.1

Use an extinguishing agent suitable for the surrounding fire or 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

Special hazards arising Hazards due to the substance or mixture:

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

mixture

5.2

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.

Decomposition products may include the following materials:

carbon dioxide

carbon monoxide

nitrogen oxides

sulfur oxides

phosphorus oxides

metal oxide/oxides

Advice for firefighters Protective actions to be taken when fighting fires

No special measures are required

Appropriate protective equipment

5.3

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 protective clothing and personal respiratory equipment), in accordance with EN469 for a basic level of protection against chemical incidents.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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 as a result of high temperatures. 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

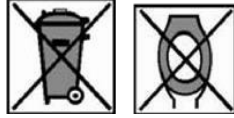
For non-emergency personnel

No action should be taken that involves an individual risk or in the absence of appropriate training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specific clothing is required to handle the spill, refer to Section 8 for appropriate and inappropriate materials. See also the information contained in "For personnel other than response personnel"

Environmental precautions



6.2

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

6.3

For containment:

Sewer coverage

For cleaning up:

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.1

Advice on professional hygiene in general:

It is prohibited to eat, drink or smoke in areas where this product is handled, stored or used. It is recommended that staff wash their hands and face before eating, drinking or smoking. Remove contaminated clothing and protective equipment before entering a food court. See also section 8 for more information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store upright in the original container away from direct sunlight in a dry, cool and well-ventilated place away from incompatible materials (see section 10). Keep container tightly closed and sealed until ready for use. Keep container upright, tightly closed when not in use. Containers that have been opened must be carefully closed again and kept in an upright position to prevent leaks. Do not store in unlabelled containers. Do not store in the presence of food products. Use an appropriate container to

7.2

avoid contamination of the surrounding environment. Surround storage facilities with containment dykes to prevent soil and water pollution in the event of a spill.

Specific end use(s)

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 waterproof pavement.

8 SECTION 8 : EXHIBITION CONTROLS/INDIVIDUAL PROTECTION

8.1 Control parameters

Not applicable

8.1

Use good industrial hygiene practices.

8.2 Exposure controls

Ingredient name

Exposure limits

Cobalt nitrate

ACGIH TLV (United States, 3/2015). TWA: 0.02 mg/m³, (as Co) 8 hours. Form: Inorganic

Appropriate engineering controls

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location

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

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced, use dust goggles in accordance with NF EN166.

Skin protection

Hands: Wear suitable protective gloves in case of prolonged or repeated contact with the product.

Chemical-resistant, impervious gloves complying with an approved standard (NF EN374) should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before

Environmental exposure controls handling this product. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

9 SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Physical state: Powder Color: Green
Odour	Odorless
pH	5.8 [Conc. (% w/w): 1%]
Melting point	Not available
Freezing point	Not available
Initial boiling point and boiling range	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Upper/lower flammability or explosive limits	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	2.2
Solubility(ies) 20°C	Soluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available
Refraction index	Not available
Rotary power	Not available

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 hazardous polymerization can be produced by any of these components 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	Reactive or incompatible with the following materials: reducing materials, Oil, organic solvents
10.6	Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 SECTION 11 : TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

a) acute toxicity

Ingredient name	Result	Species	Dose	Exposure
Calcium ammonium nitrate	LD50 Oral	Rat	4715 mg/kg	-
Citric Acid	LD50 Oral	Rat	3g/kg	-
Cobalt nitrate	LD50 Oral	Rat	434 mg/kg	-

(b) skin corrosion/irritation;

Ingredient name	Result	Species	Score	Exposure	Observation
Citric Acid	Eyes - Severe irritant	Rabbit	-	24 hours 750 µg	-
	Skin – Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin – moderate irritant	Rabbit	-	0.5 mL	-

- (c) serious eye damage/irritation; © There is no data available.
- (d) respiratory or skin sensitisation; (d) Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
- (e) germ cell mutagenicity; (e) No known significant effects or critical hazards
- (f) carcinogenicity; (f) No known significant effects or critical hazards
- (g) reproductive toxicity; (g) No known significant effects or critical hazards
- (h) STOT-single exposure; H, I, j : There is no data available.
- (i) STOT-repeated exposure;
- (j) aspiration hazard
- Symptoms related to the physical, chemical and toxicological characteristics
 - Ingestion: No known significant effects or critical hazards.
 - Inhalation: respiratory tract irritation coughing
 - Skin exposure: No known significant effects or critical hazards.
 - Eye exposure: pain or irritation watering redness
- Delayed and immediate effects as well as chronic effects from short- and long-term exposure
 - No known significant effects or critical hazards.
 - Potential chronic health effects
 - Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
- Interactive effects
 - No known significant effects or critical hazards.
- Absence of specific data
 - No known significant effects or critical hazards.
- Mixtures
 - No known significant effects or critical hazards.
- Mixture versus substance information
 - No known significant effects or critical hazards.
- Other information
 - No known significant effects or critical hazards.

12 SECTION 12 : ECOLOGICAL INFORMATION

12.1 Toxicity No data available to date to the best of our knowledge

Product/ ingredient name	Result	Species	Exposure
Citric Acid -	Acute LC50 160000 µg/L Marine water	Crustaceans Carcinus maenas – Adult	48 hours
Cobalt nitrate	Acute EC50 10233 µg/L Marine water	Crustaceans - Artemia salina – Egg	48 hours
	Acute IC50 19.57 mg/L Marine water	Algae - Phaeodactylum tricornutum - Exponential growth phase	72 hours
	Acute IC50 19.19 mg/L Marine water	Algae - Phaeodactylum tricornutum - Exponential growth phase	96 hours
	Acute LC50 3400 µg/L Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 66800 µg/L Fresh water	Fish - Carassius auratus	96 hours

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

Product/ ingredient name	LogPow	BCF	Potential
Citric Acid - Cobalt nitrate	-1.8	-	Low
	-	15600	high

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 There is no data available.

12.6 Other adverse effects No known significant effects or critical hazards.

13 SECTION 13 : DISPOSAL CONSIDERATIONS

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

13.1

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 -

14.3	Transport hazard class(es)	-
	ADR	Not regulated. Non-hazardous transport
	IMDG	IMDG/ IATA
	OACI/IATA	Remarks Special Provision A83 (208): This product is a calcium nitrate fertilizer, consisting mainly of a double salt (calcium nitrate and ammonium nitrate) containing not more than 10 percent ammonium nitrate and more than 12 percent water of crystallization.
14.4	Packing group	-
14.5	Environmental hazards	No
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 available

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

16.1	Abbreviations and acronyms:	<p>ETA = Acute Toxicity Estimation</p> <p>CLP = Regulation 1272/2008/EC on classification, labelling and packaging of substances and mixtures</p> <p>DNEL = Derived no-effect dose</p> <p>DMEL = Derived no-effect dose</p> <p>EUH = Specific hazard statement CLP</p> <p>CPSE = Predicted no-effect concentration</p> <p>RRN = REACH registration number</p> <p>PTB = Persistent, Toxic and Bioaccumulative</p> <p>tPtB = Very persistent and very bioaccumulative</p> <p>bw = Body mass</p>
16.1	Key literature references and sources for data	<p>Regulation (EC) 1907/2006 of the European Parliament (REACH)</p> <p>Regulation (EC) 1272/2008 of the European Parliament (CLP)</p> <p>Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)</p> <p>Regulation (EC) 453/2010 of the European Parliament Regulation (EC) 286/2011 of the European Parliament (II Atp. CLP)</p>
16.2		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
Date of revision: 05/15/2016
Previous version date: 06/30/2015
Version: 3

16.3 Indication of changes:

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

Not applicable, to the best of our knowledge

The 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. 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 user must ensure that he is not responsible for anything else according to texts other than those mentioned.