

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

pH Up

Date : 01 january 2008

Version No. 4

Review date: 07 Octobre 2019

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

Product identifier

1.1 A. Product name: PH UP

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

Relevant identified uses of the substance or mixture:

pH Up increases the pH in hydroponic nutrient solutions.

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 considered dangerous. Skin Corr. 1, H314 Eye Dam. 1, H318
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Additional information :

Hazards for humans Causes severe skin burns and eye damage.

Environmental hazards None

Physico-chemical hazards None

Other hazards None

Labelling elements

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

Hazard pictograms



Signal word DANGER

2.2 Substances Potassium carbonate
Potassium silicate

Hazard statements H: H314 Causes skin burns
H318 Causes serious eye damage.

Precautionary statements P: Phrases P
P101 If you consult a doctor, keep the container or label available
P102 Keep out of reach of children
P103 Read the label before use
P280 Wear protective gloves. Wear eye or face protection. Wear protective clothing.
P314 In case of discomfort, consult a doctor.
P405 - Store under lock and key.

2.3 Other hazards

None

3 SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Not applicable

3.2 Mixtures Name pH Up

Description The product is an aqueous solution containing potassium carbonate and potassium silicate

Chemical name	Weight % content (or range)	CAS NUMBER
Potassium Carbonate	>10 <20	CAS: 584-08-7
Potassium Silicate	>0.3 <1.2	CAS: 1312-76-1

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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

4 SECTION 4 : FIRST AID MEASURES

In general, if in doubt or if symptoms persist, seek medical attention. Do not give anything by mouth to an unconscious person.

4.1

Description of first aid measures

Following eye contact	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 for at least 15 minutes. Remove contaminated clothing.
Following ingestion	Consult a doctor immediately. Chemical burns should be treated promptly by a doctor. Get medical attention immediately. Rinse the mouth with water. If a person has swallowed this product and is conscious, give small amounts of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Call a doctor if the adverse health effects persist or worsen. Do not induce vomiting unless directed by medical personnel.
Following inhalation	If inhaled, move to fresh air. Keep her warm and at rest, in a position that allows her to breathe comfortably. Consult a doctor immediately. If it is suspected that fumes are present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.
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 still 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. Always wear protective gloves and a resuscitation mask in case of artificial respiration. Wash hands thoroughly after first aid.
Other information	Wash contaminated clothing thoroughly with water before removing it, or wear gloves. 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
pH Up causes irritation, chemical (alkaline) burns to the skin or eyes or degreasing of the skin depending on the duration and intensity of exposure.
Potassium carbonate is generally considered a safe food additive. Its toxicity is due to its high alkalinity in concentrated form.

4.3 Indication of any immediate medical attention and special treatment needed
Note to the attending physician
Symptomatic treatment required. Immediately contact a specialist for the treatment of poisonings if large quantities have been ingested or inhaled.
Specific treatments
No special treatment.

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.

Suitable extinguishing media:

5.1

In the event of a nearby fire or 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	<p>Special hazards arising from the substance or mixture</p> <p>Hazards due to the substance or mixture: The product does not present a specific risk of fire or explosion.</p> <p>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. The possible thermal decomposition products are: carbon dioxide / carbon monoxide / metal oxide / metal oxide / metal oxides</p>
	<p>Advice for firefighters</p> <p><u>Protective actions to be taken when fighting fires</u> None</p> <p><u>Appropriate protective equipment</u> 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. Have a minimum of emergency facilities or intervention elements (fire blankets, medicine kit, etc.) in accordance with Directive 89/654/EC.</p>
5.3	
	<p>Other information</p> <p>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, if possible 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.</p>
5.4	

6 SECTION 6 : ACCIDENTAL RELEASE MESURES

6.1 Personal precautions, protective equipment and emergency procedures

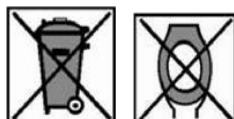
For non-emergency personnel

No action should be taken that involves an individual risk or in the absence of appropriate training. Evacuate the area. Prevent access to persons not required and not wearing protective clothing. DO NOT TOUCH or walk in spilled material. Ensure adequate ventilation. Wear appropriate respiratory protection when the ventilation system is inadequate. Wear 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 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:	Restrict access; isolate the risk area and prevent entry. Do not touch or walk through spilled liquid. If possible, eliminate the leak. Prevent entry into storm sewers or waterways. If possible, isolate, dam or dike and try to capture the equipment. Suction with a pump or vacuum truck. Use non-combustible absorbent material, such as sand, earth, vermiculite or diatomaceous earth. Contaminated absorbent material may present the same hazard as the spilled product. If it is impossible to contain the material, dilute with large amounts of water. Dispose through a licensed waste disposal contractor. Comply with environmental laws for waste disposal.
Other information:	Do not put the spilled product in contact with combustible or incompatible materials. Cleaning personnel must wear equipment to protect skin and eyes and to protect themselves from vapours
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

7.1	Precautions for safe handling	Wear appropriate personal protective equipment (see Section 8). Do not put in contact with eyes, skin or clothing. Do not ingest. If during normal use the substance presents a respiratory hazard, adequate ventilation or the use of a respirator is mandatory. Keep in the original container or in another approved substitute container made of a compatible material and kept hermetically sealed when not in use. Keep away from acids. Empty containers retain product residues and can be dangerous. Do not reuse the containers. 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.
7.2	Conditions for safe storage, including any incompatibilities	Store in original container, out of direct sunlight, in a cool, dry, well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store under lock and key. Store separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully closed and kept in an upright position to prevent leakage. Do not store in unlabelled containers. Use an appropriate containment method to avoid environmental contamination. Close containers before and after each use to avoid sources of moisture or heat. Store in areas with impermeable pavement.
7.3	Specific end use(s)	No specific end uses. 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	No applicable. Respect good industrial hygiene practices
8.2	Exposure controls	
	Appropriate engineering controls	If user handling causes dust, fumes, gases, vapours or mist, use enclosed enclosures, source exhaust ventilation, or other integrated automatic control systems to keep the

	<p>technician's exposure threshold to airborne contaminants below recommended or legal limits.</p> <p>Hygiene measures:</p> <p>Wash hands, forearms and face thoroughly after handling chemicals, before eating, smoking and using the toilet, and at the end of the workday. It is recommended to use appropriate techniques to remove potentially contaminated clothing. Wash contaminated clothing before reuse. A washing facility or water must be available for cleaning the eyes and skin.</p> <p>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.</p>
Individual protection measures, such as personal protective equipment	
Eye/face protection	<p>Use eye protection in accordance with an approved standard whenever a risk assessment indicates that it is necessary to avoid exposure to liquid splashes, fine particles, gases or dust. Recommended: CEN tight-fitting waterproof glasses: EN166</p>
Skin protection	<p>The use of impermeable and chemical-resistant gloves that meet an approved standard is always mandatory when handling chemicals if a risk assessment indicates it.</p> <p>> 8 hours (time before piercing): Gloves: It is recommended to wear protective gloves thicker than 0.35mm when using this product for normal use (norm NFEN374).</p>
Respiratory protection	<p>Ensure adequate ventilation, especially in enclosed areas.</p> <p>When room ventilation is insufficient, wear respiratory protective equipment.</p> <p>Recommended: The P2 filter (EN 143)</p>
Body protection	<p>Personal protective equipment for the body should be chosen according to the task to be performed and the risks involved, and it is recommended to have it validated by a specialist before handling the product.</p> <p>After contact with the product, all parts of the body that have been in contact with the product must be washed.</p>
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 pH Up compounds are in aqueous solution.
	Color: pale blue, light blue
Odour	No odor
pH	11.5-11.9
Melting point	Not determined
Freezing point	Not determined
Initial boiling point and boiling range	100°C
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	1.12
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.
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	Avoid any contamination, including contamination by metals, dust or organic substances. Comply with usual precautionary practices regarding chemicals.
10.5	Incompatible materials	Oxidizing materials, metals
10.6	Hazardous decomposition products	Under normal storage and use conditions, no hazardous decomposition products should occur.

11 SECTION 11 : TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

a) acute toxicity;	a) (a) Potassium carbonate
(b) skin corrosion/irritation;	LD50 Oral - Rat - Dose 1870 mg/kg
(c) serious eye damage/irritation;	b,d,e,f,g,h,I,j : No data available
(d) respiratory or skin sensitisation;	b) Irritation and corrosion: Causes burns
(e) germ cell mutagenicity;	c) Causes serious eye damage
(f) carcinogenicity;	d) Possible irritation of the respiratory system.
(g) reproductive toxicity;	(e) NO mutagenic effect
(h) STOT-single exposure;	(f) NO carcinogenic effect
(i) STOT-repeated exposure;	(g) No known significant effects or critical hazards
(j) aspiration hazard	(h) No data available
	(i) No data available
	(j) No data available

Symptoms related to the physical, chemical and toxicological characteristics	Inhalation : No known significant effects or critical hazards. Ingestion : No known significant effects or critical hazards. Skin contact : Pain or irritation redness blistering may occur - causes severe burns Eye contact : Pain and tearing redness - causes severe eye damage
Delayed and immediate effects as well as chronic effects from short- and long-term exposure	Health effects are considered unlikely if the product is used as recommended. No known significant effects or critical hazards.
Interactive effects	No known significant effects or critical hazards.
Absence of specific data	No data available
Mixtures	No data available
Mixture versus substance information	No known adverse effects or symptoms resulting from exposure to the mixture or its components.

12 SECTION 12 : ECOLOGICAL INFORMATION


12.1 Toxicity	No known significant effects or critical hazards.		
Product/ingredient name	Result	Species	Exposure
Potassium carbonate	Acute LC50 630000 µg/L	Crustaceans - Ceriodaphnia	48 hours
	Fresh water Acute LC50	dubia	48 hours
	650000 µg/L Fresh water	Daphnia - Daphnia magna	
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	Not Applicable		
12.6 Other adverse effects	No known significant effects or critical hazards.		

13 SECTION 13 : DISPOSAL CONSIDERATIONS

Waste treatment methods	Product : Do not discharge into sewers or waterways. Waste: Waste management should be carried out without endangering human health and without harming the environment, including without creating a risk to water, air, soil, fauna and flora.
13.1	Recycle or dispose of in accordance with current legislation, preferably by a collector or approved 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. Packaging : It is recommended to avoid or reduce waste generation as much as possible. Recycle packaging waste. Consider incineration or landfilling only if recycling is not possible.

Waste codes / waste designations according to LoW: Not determined

14 SECTION 14 : TRANSPORT INFORMATION

14.1	UN number	UN3266
14.2	UN proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium silicate, anhydrous)
14.3	Transport hazard class(es)	8 
	ADR	ADR/RID
	IMDG	Code tunnel (E)
	OACI/IATA	IMDG : Marine pollutant : No Emergency schedules (EmS) : F-A, S-B
14.4	Packing group	III
14.5	Environmental hazards	No
14.6	Special precautions for user	Transportation with local users: Ensure that people transporting the product are aware of the measures to be taken in the event of an accident or accidental spill.

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.
	Règlement UE (CE) n° 1907/2006 (REACH)	Annex XIV: List of substances subject to authorisation: none of the components are listed
15.2	Chemical safety assessment	Not yet completed

16 SECTION 16 : OTHER INFORMATION

16.1	Abbreviations and acronyms:	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
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		<p>PTB = Persistent, Toxic and Bioaccumulative</p> <p>tPtB = Very persistent and very bioaccumulative</p> <p>bw = Body mass</p> <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> <p>The Merck index. Ed. 10 Handling and chemical safety</p> <p>Niosh - Register of toxic effects of chemical substances</p> <p>INRS - Toxicological Data Sheet</p> <p>Patty - Industrial hygiene and toxicology</p> <p>N.I. Sax - Dangerous properties of Industrial Materials - 7 Ed., 1989</p> <p>ECHA website</p>
16.2	Key literature references and sources for data	
16.3	Indication of changes:	<p>Date of revision: 18/06/2018</p> <p>Previous version date: 25/11/2018</p> <p>Version: 3</p> <p>Revision : Complete revision in accordance with Commission Regulation (EU) 2015/830.</p>
16.4	<p>Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:</p> <p>Relevant H-statements (number and full text):</p> <p>Full text of the classifications[CLP/SGH]</p> <p>Note</p>	<p>Classification</p> <p>Skin Corr./Irrit. 1B H314</p> <p>Eye Dam. 1, H318</p> <p>Justification</p> <p>Test data</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H318 Causes serious eye damage.</p> <p>Skin Corr./Irrit. 1B, H314: DERMAL CORROSION/CUTANEOUS IRRITATION - Category 1B</p> <p>Eye Dam. 1, H318 : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1</p> <p>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. This information is given only as an indication in order to allow handling, manufacture, storage, transport, distribution, provision, use and disposal operations under satisfactory conditions of safety, and should not be interpreted as a guarantee or considered as quality specifications, as these operations cannot be controlled by us. This information also applies only to the product named by name and, unless otherwise specified, may not be applicable in the event of mixing of this product with other substances or usable for any manufacturing process. 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</p>

other than those mentioned.

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