

Safety Data Sheet

pH -



Version: 8
 Version date: 22/11/2023
 Language: EN
 According to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No. 2020/878)

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

1.1. Product identifier

Trade name/designation : pH -.
 Article No (user) : PH01xxx.
 UFI : TU1K-G3FR-200E-HED0

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

Relevant identified uses : Lowers pH in plant nutrient solutions.
 Uses advised against : No data available.
 Toute utilisation non spécifiée dans cette section ou dans la section 7.3.

1.3. Details of the supplier of the safety data sheet

Supplier : **Name:** TERRA AQUATICA SAS
Street: 4 Blvd du Biopole
Postal code/City: 32500 Fleurance
P.O. Box: 32500
Country: France :
Telephone: +33 (0)562060830
Website: Www.terraaquatica.com
E-mail: Info@terraaquatica.com

1.4. Emergency Telephone Number

United Kingdom:

+35625454030 +35 (0) 31 837 9964 (medical professionals) +35 (0) 31 809 2166 (public) In England and Wales: dial 111 (NHS 111), In Scotland: dial 111 (NHS 24), In Northern Ireland: Contact your local GP or pharmacist during normal hours. During GP Out-of-Hours (www.gpoutofhours.hscni.net/): Belfast HSC Trust, (North & West) 028 9074 4447, (South & East) 028 9079 6220 South Eastern HSC Trust, (North Down & Ards) 028 9182 2344, (Lisburn & Downpatrick) 028 9260 2204, Dalriada Urgent Care (Northern Trust area) 028 2566 3500, Southern HSC Trust 028 3839 9201, Western Urgent Care 028 7186 5195.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to the regulation (EC) n°1272/2008 (CLP) and its amendments

Hazards identification:

H314 Skin Corr. 1A Causes severe skin burns and eye damage

2.2. Label elements

Label elements according to the regulation (EC) n°1272/2008 (CLP) and its amendments

Labelling

Hazard pictograms



Signal word

Danger

Hazard Statements

H314 Causes severe skin burns and eye damage

Precautionary Statements

P102 Keep out of reach of children.

Precautionary Statements - Prevention

P264 Wash the hands thoroughly after handling.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

331

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

353

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/doctor/...

Contains

urea phosphate, orthophosphoric acid, nitric acid

2.3. Other hazards

According to Regulation (EU) 1907/2006, no substances are assessed as PBT or vPvB.

According to Regulation (EU) 2017/2100 or Regulation (EU) 2018/605, no substances are known to have endocrine disrupting properties.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures**

In accordance with the product knowledge, no nanomaterials have been identified.

The mixture does not contain any substances classified as Substances of Very High Concern (SVHC) by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>.

Substance		Concentration (%)	Specific concentration limits	Classification	
orthophosphoric acid					
CAS N°	7664-38-2	5.0% ≤C< 10.0%	Skin Corr. 1B; H314: C ≥ 25 %	H314	Skin Corr. 1B
EC N°	231-633-2		Skin Irrit. 2; H315: 10 % ≤ C < 25 %		
IDX N°	015-011-00-6		Eye Irrit. 2; H319: 10 % ≤ C < 25 %		
Registration number	01-2119485924-24-XXXX				
nitric acid					
CAS N°	7697-37-2	1.0% ≤C< 3.0%	Inhalation: ATE = 2.65 mg/L (Vapours) Ox. Liq. 3; H272: C ≥ 65 % Skin Corr. 1A; H314: C ≥ 20 % Skin Corr. 1B; H314: 5 % ≤ C < 20 %	H272 H314 H331	Ox. Liq. 3 Skin Corr. 1A Acute Tox. 3 INHALATION
EC N°	231-714-2				
IDX N°	007-004-00-1; 007-030-00-3				
Registration number	01-2119487297-23-XXXX				

Remark

Text phrases and H- EUH-: see section 16.

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures****General information:**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Remove victim out of the danger area.

Keep affected person warm, still and covered.

Following inhalation:

Under normal conditions of use, inhalation is unlikely.

Remove person to fresh air and keep comfortable for breathing.

In case of respiratory tract irritation, consult a physician.

Following skin contact:

Remove contaminated, saturated clothing immediately.

After contact with skin, wash immediately with plenty of water and soap.

In case of skin irritation, consult a physician.

Following eye contact:

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion:

Never give anything by mouth to an unconscious person or a person with cramps.

Rinse mouth immediately and drink plenty of water.

Do NOT induce vomiting.

Self-protection of the first aider:

First aider: Pay attention to self-protection!.

4.2. Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

Foam.
Extinguishing powder.
Carbon dioxide (CO₂).
Sand.

Unsuitable extinguishing media:

Strong water jet.

5.2. Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Do not inhale vapors and fumes.
Co-ordinate fire-fighting measures to the fire surroundings.
Move undamaged containers from immediate hazard area if it can be done safely.
Use caution when applying carbon dioxide in confined spaces. carbon dioxide can displace oxygen.
Use water spray jet to protect personnel and to cool endangered containers.
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protection equipment.
Remove persons to safety.
Use appropriate respiratory protection.
Provide adequate ventilation.

6.2. Environmental precautions

Ensure that waste is collected and contained.
Contain leaks or spills within cabinets with removable trays.
Cover drains.
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Treat the recovered material as prescribed in the section on waste disposal.
Collect in closed and suitable containers for disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Wipe up with absorbent material (eg. cloth, fleece).
Never return spills in original containers for re-use.
Ventilate affected area.
Wear equipment to protect skin and eyes; to protect against vapours.

6.4. Reference to other sections

Safe handling: see section 7.
Disposal: see section 13.
Personal protection equipment: see section 8.

Additional information

Not available

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

PROTECTIVE MEASURES:

Avoid contact with skin, eyes and clothes.
Wear personal protective clothing (see section 8).
Do not put any product-impregnated cleaning rags into your trouser pockets.
Use only in well-ventilated areas.
If local exhaust ventilation is not possible or not enough, the entire work area must be ventilated by technical means.
Avoid breathing gas/fumes/vapour/spray.
Keep away from sources of ignition - No smoking.
Always close containers tightly after the removal of product.

Usual measures for fire prevention.

Advices on general occupational hygiene:

Wash hands before breaks and after work.

Wash contaminated clothing before reuse.

Remove contaminated, saturated clothing immediately.

Work in well ventilated zones or use proper respiratory protection.

When using do not eat, drink, smoke, sniff.

Provide eye shower and label its location conspicuously.

In the immediate working surroundings there must be:

Provide eye shower and label its location conspicuously.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a cool, well-ventilated place.

Keep/store only in original container.

Recommended storage temperature: between 5 and 30°C.

Store upright to avoid risk of leakage.

Requirements for storage rooms and vessels:

Store locked up.

Ensure adequate ventilation of the storage area.

Sewers and ducts must be protected against the entry of the product.

Advice on joint storage:

Keep away from food, drink and animal feedingstuffs.

7.3. Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

Not available

Biological limit values:

Not available

Exposure limits at intended use:

Not available

Remark:

Not available

8.2. Exposure controls

Appropriate engineering controls:

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Provide adequate ventilation as well as local exhaust at critical locations.

Individual protection measures, such as personal protective equipment:



Eye/face protection

: Goggles.

Suitable eye protection:

Wear eye protection equipment.

Recommended eye protection articles:

Face protection shield.

Skin protection

: Hand protection:

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Suitable gloves type:

Wear protective gloves.

Suitable material:

NBR (nitrile rubber).

Additional hand protection measures:

Do not wear gloves near machines and rotating tools.

Use gloves only once.

Remark:

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Respiratory protection

Breakthrough times and swelling properties of the material must be taken into consideration.

Body protection:**Suitable protective clothing:**

Lab coat.

Chemical resistant safety shoes.

Respiratory protection necessary at:

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Suitable respiratory protection apparatus:

Wear respiratory protection.

Remark:

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. Observe the wear time limits as specified by the manufacturer.

Use only respiratory protection equipment with CE-symbol including four digit test number.

Environmental exposure controls:

Not available

Consumer exposure controls:

Not available

Additional information

Not available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Physical state	: Liquid
Colour	: Yellowish
Odour	: No Odour
pH	: 1
Melting point/freezing point	: -8°C
Initial boiling point and boiling range	: 104°C
Flash point	: Not available
Flammability	: Not Flammable
Upper/lower flammability or explosive limits	: Not Applicable
Vapour pressure	: 2.3 Kpa
Vapour density	: Not available
Relative density	: 1.12
Solubility(ies)	: Entièrement Soluble
Partition coefficient n-octanol/water (log value)	: Not applicable
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
Kinematic viscosity	: Not applicable
Solubility in other Solvents	: Not available
Particle characteristics	: Not applicable

9.2. Other safety information**Information concerning to the classes of physical hazards**

Not available

Other security characteristics

Not available

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

No data available.

Stable. No particular risk of reaction with other materials under normal conditions of use.

10.2. Chemical stability

The product is stable when stored at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

Additional information

Not available

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity:

The product is not classified.

Substances:

Not available

Acute dermal toxicity:

The product is not classified.

Substances:

Not available

Acute inhalation toxicity:

The product is not classified.

Substances:

Not available

Skin corrosion/irritation:

The product is classified Skin Corr. 1A according to the referenced regulation.

Causes severe skin burns and eye damage.

Substances:

Not available

Serious eye damage/irritation:

Causes severe eye damage.

Substances:

Not available

Skin sensitisation:

The product is not classified.

Substances:

Not available

Specific target organ toxicity (repeated exposure):

The product is not classified.

Substances:

Not available

Specific target organ toxicity (single exposure):

The product is not classified.

Substances:

Not available

Carcinogenicity:

The product is not classified.

Substances:

Not available

Reproductive toxicity:

The product is not classified.

Substances:

Not available

Germ cell mutagenicity:

The product is not classified.

Substances:

Not available

Sensitisation to the respiratory tract:

The product is not classified.

Substances:

Not available

Additional information:

Not available

11.2. Information on other hazards

Endocrine disrupting properties:

According to Regulation (EU) 2017/2100 or Regulation (EU) 2018/605, no substances are known to have endocrine disrupting properties.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Based on available data, the classification criteria are not met.

Substances:

Not available

12.2. Persistence and degradability

The product has not been tested.

Substances:

Not available

12.3. Bioaccumulative potential

Citric acid/-1,8/-/Low.

The product is not expected to have any effect on the environment if used correctly.

Substances:

Not available

12.4. Mobility in soil

The product has not been tested.

This product can be carried by groundwater seepage or surface runoff, as it is completely soluble.

Substances:

Not available

12.5. Results of PBT and vPvB assessment

According to Regulation (EU) 1907/2006, no substances are assessed as PBT or vPvB.

12.6. Endocrine disrupting properties

According to Regulation (EU) 2017/2100 or Regulation (EU) 2018/605, no substances are known to have endocrine disrupting properties.

12.7. Other adverse effects

Not available

Additional ecotoxicological information

Not available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product/Packaging disposal:

Waste codes/waste designations according to EWC/AVV:

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

06 10 99 Waste not otherwise specified.

15 01 02 Plastic waste (container).

Waste treatment options:

Appropriate disposal/Product:

Waste requiring special supervision.

Dispose of waste according to applicable legislation.

Delivery to an approved waste disposal company.

Appropriate disposal/Package:

Non-contaminated packages must be recycled or disposed of.

Contaminated packing must be completely emptied and can be reused after proper cleaning.

Packing which cannot be properly cleaned must be disposed of.

Handle contaminated packages in the same way as the substance itself.

Dispose of waste according to applicable legislation.

Remark:

Collect the waste separately.

Consult the appropriate authorities about waste disposal.

Additional information

Not available

SECTION 14: TRANSPORT INFORMATION

Land transport
(ADR/RID):

Inland waterway
transport (ADN):

Sea transport (IMDG):

Air transport (ICAO-
TI/IATA-DGR):

14.1	UN number:	3264	3264	3264	3264
14.2	UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
14.3	Transport hazard class(es):				
	Class or Division:	8	8	8	8
	Hazard label(s):				
14.4	Packing group:	III	III	III	III

14.5. Environmental hazards

Not available

14.6. Special precautions for user

Not available

14.7. Bulk shipping according to IMO instruments

Not available

Additional information

Not available

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

This SDS has been established in accordance with REACH regulation, including its amendments: REACH Regulation (EC) No 1907/2006.
This SDS has been established in accordance with CLP regulation, including its amendments: CLP Regulation EC No. 1272/2008.

EU legislation:

The product complies with Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

Additional information

Not available

SECTION 16: OTHER INFORMATION**Indication of changes**

Updated in accordance with Regulation (EU) 2020/878 via EcoMundo software.

Abbreviations and acronyms

CAS: Chemical Abstract Service Number.

IATA: International Air Transport Association.

IMDG: International Maritime Dangerous Goods Code.

DPD Dangerous Preparation Directive.

UN number: United Nations number.

No EC: European Commission Number.

ADN/ADNR: Regulations concerning the transport of dangerous substances in barges on the waterways.

ADR/RID: European Agreement concerning the International Carriage of Dangerous Goods by Road/Regulations concerning the international carriage of dangerous goods by rail.

CLP: Classification, labeling and packaging.

VPvB: very persistent and very bioaccumulative substances.

Key literature references and sources for data

No data available.

Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

Complies with ATP 18, Regulation (EU) n°2022/692.

Classification of the mixture is in accordance with the evaluation method described in Regulation (EC) No 1272/2008.

Relevant R-, H- and EUH-phrases (Number and full text)

H272	Ox. Liq. 3	May intensify fire; oxidiser.
H314	Skin Corr. 1A	Causes severe skin burns and eye damage
H331	Acute Tox. 3 INHALATION	Toxic if inhaled.

Training advice

Refer to Sections 4, 5, 6, 7 and 8 of this safety data sheet.

Additional information

Creation date: 01/06/2016

Version date: 22/11/2023

Printing date: 11/12/2023

The information given in this Safety Data Sheet is based on our present knowledge and national regulations. This Safety Data Sheet describes safety requirements relative to identified uses, it doesn't guarantee all the product properties particularly in the case of non identified uses. The product mustn't be used for any uses other than those identified under heading 1. Since the user's working conditions are not known by us, it is the responsibility of the user to take all necessary measures to comply with legal requirements for specific uses and avoid negative health effects.