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

TriPart Micro
Hard Water

Date : 01 January 2008 Version No. 5 Review date: 03/01/2022

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

Product identifier

1.1 Product name: TRIPART MICRO HARD WATER

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

Relevant identified uses of the substance or mixture:

TriPartMicro Hard Water is a mixture of mineral salts formulated and mixed in proportions that ensure optimal plant nutrition.

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	Terra Aquatica
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	**999**
Fire and rescue services	**999**
Police	**101**
EU Emergency call line	**112**
Toxicological Information Centre ORFILA (INRS)	**+33 01 45 41 59 59**
Toxicological Information Centre South West	**+33 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
Enviromental 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

TRIPART MICRO HARD WATER

Description

TriPart Micro HardWater is a specially formulated mixture of chemicals that are blended in proportions that ensure optimal plant nutrition. The chemical identity of the compounds and the exact proportions used in the blend are a trade secret; however, they are derived from : Potassium nitrate, magnesium nitrate, nitric acid, copper nitrate, ammonium sulphate, ammonium nitrate, potassium borate, iron EDDHA chelate, manganese and zinc EDTA chelates, sodium molybdate, calcium nitrate and cobalt sulphate.

Chemical name	Concentration (%)	N°CAS
Ammonium nitrate	≥10 - ≤25	6484-52-2
Calcium ammonium nitrate	≥5 - ≤10	15245-12-2

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	Wash immediately with plenty of water, keeping the eyelids wide apart and consult a specialist.
Following skin contact	Rinse thoroughly with soapy water. Remove contaminated clothing.
Following ingestion	Do not induce vomiting, seek medical attention immediately by showing the product label.

	Following inhalation	Move victim to fresh air. Keep warm and at rest. In case of breathing difficulty: call a doctor.
	Self-protection of the first aider	Depending on the first aid context, wear appropriate protective equipment including a mask or filtered respirator and, if necessary, operate in the presence of another co-worker. Always wear protective gloves and a resuscitation mask in case of artificial respiration. Wash hands thoroughly after giving first aid. If your clothing becomes contaminated with a chemical during first aid procedures, 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**	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

5.1	**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: 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. Decomposition products may include the following materials: Carbon dioxide Carbon monoxide Nitrogen oxides Metal oxide / metal oxides
	Advice for firefighters	<u>Protective actions to be taken when fighting fires</u> Quickly isolate the site by evacuating all persons from the area near the incident in case of fire. Do not take any action involving a personal risk or in the absence of adequate training. Keep containers away from fire if it can be done without risk. Use water or water spray to keep containers exposed to fire cool.

5.3

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 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

5.4

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.

6 SECTION 6 : ACCIDENTAL RELEASE MESURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ensure good ventilation.

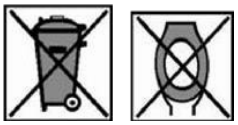
In case of accidental release of a large quantity, evacuate all personnel and allow access only to trained operators with appropriate personal protective equipment. (See section 8)

For emergency responders

Responders 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:

Mechanically collect the spilled product and remove any residues by water jets. Provide adequate ventilation at the location of the spill. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor 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.

Personal protective equipment: see section 8

6.4

Withdrawal considerations: see section 13.

See section 1 for emergency contact information.

7 SECTION 7 : HANDLING AND STORAGE

Precautions for safe handling

Avoid formation of suspended particles and dispersion of the product in the air.

Provide adequate ventilation in areas where suspended particles develop.

Keep away from flames and sparks. Do not smoke. Keep away from heat and other sources

7.1

		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 exhaust.
		Store container upright, tightly closed in a cool, dry, well-ventilated place.
7.2		Close containers before and after each use to avoid sources of moisture or heat. Store in labelled bottles.
		Store in waterproof areas if possible.
	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
		Use 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	Use personal protective equipment 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 compliance with the provisions of the Labour Code.
	Eye/face protection	It is necessary 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.
		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 handling this product.
	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 TriPartMicro Hard Water compounds are in aqueous solution (liquid)
	Color: (dark) brown.
Odour	No odor
pH	5.6
Melting point	Not Applicable
Freezing point	-1.11°C (30°F)
Initial boiling point and boiling range	102.778°C (217°F)

	Flash point	Not applicable
	Evaporation rate	Not applicable
	Flammability (solid, gas)	Non inflammable
	Upper/lower flammability or explosive limits	Not applicable
	Vapour pressure	Not determined
	Vapour density	Not determined
	Relative density	1.108
	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	None
	Oxidising properties	None
	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.

No hazardous polymerization can be produced by any of these components

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**

TriPart Micro Hard Water 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.

11 SECTION 11 : TOXICOLOGICAL INFORMATION

11.1 **Information on toxicological effects**

a) acute toxicity;

Product/ingredient name	Result	Species	Dose	Exposure
Ammonium nitrate	LD50 Oral	Rat	2217 mg/kg	-
Ammonium sulfate	LD50 Oral	Rat	4715 mg/kg	-
Urea				-

(b) skin corrosion/irritation; Most of the chemicals in the TriPart Micro HardWater are toxic by ingestion, inhalation, or eye

		or skin contact.
	(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	No data available
	Symptoms related to the physical, chemical and toxicological characteristics	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.
	Delayed and immediate effects as well as chronic effects from short- and long-term exposure	No known health effects
	Numerical measures of toxicity	Route: Oral — Estimated Acute Toxicity Value: 12191.4mg/kg
	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

No known significant effects or critical hazards.

Product/ingredient name	Result	Species	Exposure
Ammonium nitrate	Chronic NOEC 6 to 12 mg/L Fresh water	Crustaceans - Cladocera Crustaces	21 days

12.2 Persistence and degradability

There is no data available.

12.3 Bioaccumulative potential

There is no data available.

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

13.1	**Waste treatment methods**	TriPart Micro HardWater can be disposed of as you would any industrial fertilizer. Do not flush to sewers or waterways. Waste: Waste management is done without endangering human health and without harming the environment, including but not limited to water, air, soil, flora and fauna. Recycle or dispose of in accordance with current legislation, preferably by a licensed collector or company. Disposal of the product/packaging: Disposal into sewers or waterways is prohibited. 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. Recover the product as far as possible. Follow local legislation.
	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**	Non-hazardous transport
14.3	**Transport hazard class(es)**	Non-hazardous transport
	ADR	Not regulated. Non-hazardous transport
	IMDG	
	OACI/IATA	
14.4	**Packing group**	Non-hazardous transport
14.5	**Environmental hazards**	Non-hazardous transport
14.6	**Special precautions for user**	Non-hazardous transport
14.7	**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Non-hazardous transport

15 SECTION 15 : REGULATORY INFORMATION

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

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	None
15.2 Chemical safety assessment	Evaluation not carried out

16 SECTION 16 : OTHER INFORMATION

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

PTB = Persistent, Toxic and Bioaccumulative

tPtB = Very persistent and very bioaccumulative

bw = Body mass

16.1 Key literature references and sources for data

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)

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

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: 03/01/2022

Previous version date: 01/02/2020

Version :5

Modification: Section 1.3, Company name

16.4 Note

The indicated mixture does not require an SDS according to the REACH requirements. This sheet is for information purposes only.

This safety data sheet complies with the requirements set out in Reg. 830/2015/EU. It does not 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 simply intended to help the recipient to assume his responsibilities. This list should not be considered exhaustive. This data sheet supplements the technical instructions for use but does not replace them. The information in this safety data sheet has been compiled by Terra Aquatica on the basis of its current knowledge (safety data sheet for the active ingredients compiled by the manufacturer and other bibliographical data) as of the date indicated. It is 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 recipient must ensure that he is not liable for anything other than what is

stated in the texts other than those mentioned.

The information describes the safety aspects of the product. It is not intended to guarantee specific properties.

It is the responsibility of our customers to observe the applicable regulations.