

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

## TrikoLogic S

Date : 01/04/2013

Version No. 4

Review date: 18/06/2019

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

#### Product identifier

**1.1 A. Product name:** **TRIKOLOGIC S**

**1.2 Relevant identified uses of the substance or mixture and uses advised against** TrikoLogic is a soil and plant auxiliary substance in compliance with European Regulation 2008/113/EC on organic farming. It improves the health and resistance of plants and strengthens root development.

#### 1.3 Details of the supplier of the safety data sheet

Supplier identification	Terra Aquatica Sarl (GHE)
Address	Route de Lecture, 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	<b>15</b>
Fire and rescue services	<b>18</b>
Police	<b>17</b>
EU Emergency call line	<b>112</b>
Toxicological Information Centre ORFILA (INRS)	<b>01 45 41 59 59</b>
Toxicological Information Centre South West	<b>05 61 77 74 47</b>

### 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]

<b>2.2</b>	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
<b>2.3</b>	<b>Other hazards</b> Reg. 1272/2008/CLP	None

### 3 SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances** Non applicable

**3.2 Mixtures Name** TrikoLogic S  
TrikoLogic S is a biological inoculant based on natural fungal spores *Streptomyces nigrescens* and *Trichoderma harzianum* and an inert (confidential) carrier.

**Description** TrikoLogic S is a biological inoculant (fungus), used to control pathogenic fungi. It improves the health and resistance of plants and strengthens root development.

### 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.

<b>4.1</b>	<b>Description of first aid measures</b>	
	Following eye contact	Slight irritation may occur. Wash immediately with plenty of water, holding eyelids wide apart.
	Following skin contact	Non-irritating. Wash thoroughly with soap and water.
	Following ingestion	Irritation of the mucosa possible. Do not induce vomiting, seek medical attention immediately by showing the product label.
	Following inhalation	Possible nasal irritation. Rinse nose with water.
	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.
	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
<b>4.2</b>	<b>Most important symptoms and effects, both acute and delayed</b>	<b>Potential acute health effects:</b> No known effect  <b>Signs/symptoms of overexposure:</b>

No specific data

**4.3 Indication of any immediate medical attention and special treatment needed** No data available

## 5 SECTION 5 : FIREFIGHTING MEASURES

**5.1 Extinguishing media** The product is not flammable. Low fire risk due to the flammability characteristics of the product under normal conditions of storage, handling and use.

Suitable extinguishing media :

In the event of a surrounding fire or continued combustion caused by improper handling, storage or use, the following extinguishing agents may be used: carbon dioxide (CO<sub>2</sub>), foam, chemical powders, and in the event of a widespread fire, also water spray.

Unsuitable extinguishing media :

In case of fire, do not use : Water jet

**5.2 Special hazards arising from the substance or mixture** Given its flammability characteristics, the product does not present a fire risk under normal storage, handling and use conditions.

A fire in the surrounding area will often produce thick black smoke. Exposure to compositional products may pose health risks. Do not breathe the fumes.

**5.3 Advice for firefighters** Protective actions to be taken when fighting fires  
Quickly isolate the area by evacuating all persons from the area in the event of a fire. Do not take any action involving personal risk or in the absence of adequate training. Keep containers away from fire if it can be done without risk. Use water or spray to keep containers exposed to fire cool.

**5.4 Other information** 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.

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.

## 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    Emergency responders will be equipped with personal protective equipment appropriate to the nature of the hazard (See section 8).

**Environmental precautions**

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

6.2



**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. The disposal of the contaminated material must be carried out in accordance with the provisions of point 13.

**Reference to other sections**

6.4

Collect the remains in an identified container: see point 13 for disposal.  
 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**

7.2

Ensure adequate local ventilation or extraction.  
 Store in a cool, dry place. Keep the container tightly closed in a dry and well-ventilated place.  
 Close containers before and after each use to avoid sources of moisture or heat.

**Specific end use(s)**

7.3

Avoid contact with strong oxidizing agents.  
 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

**Control parameters**

8.1

Not applicable  
 Respect good industrial hygiene practices.

## 8.2 Exposure controls

Appropriate engineering controls	No particular control
Individual protection measures, such as personal protective equipment	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 not necessary to wear safety glasses, but it is possible to wear glasses that comply with the NF EN166 standard before handling any products.
Skin protection	It is not necessary to wear gloves, but it is possible to wear them.
Respiratory protection	Ensure adequate ventilation, especially in enclosed areas. No protective equipment is required during normal use of the product.
Body protection	Not required
Environmental exposure controls	No protective measures.

## 9 SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	Physical state: Solid powder Color: Pale white
Odour	Slight smell of rich soil.
pH	8.3
Melting point	Not applicable
Freezing point	Not determined
Initial boiling point and boiling range	Not determined
Flash point	Not determined
Evaporation rate	Not applicable
Flammability (solid, gas)	Non inflammable
Upper/lower flammability or explosive limits	Not applicable
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	5.5
Solubility(ies) 20°C	Entirely soluble
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature	Not determined
Not determined	Not determined
Viscosity	Not determined
Explosive properties	Non applicable
Oxidising properties	Not determined
Refraction index	Not determined
Rotary power	Not determined

## 10 SECTION 10 : STABILITY AND REACTIVITY

10.1 Reactivity	No particular risk of reaction with other materials under normal conditions of use.
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<b>10.2</b>	<b>Chemical stability</b>	TrikoLogic S is stable at room temperature in closed packages and under normal storage and handling conditions.
<b>10.3</b>	<b>Possibility of hazardous reactions</b>	No risk of dangerous reactions under normal use and storage conditions.
<b>10.4</b>	<b>Conditions to avoid</b>	No special conditions to avoid. Follow usual precautionary practices regarding chemicals.
<b>10.5</b>	<b>Incompatible materials</b>	Strong acids.
<b>10.6</b>	<b>Hazardous decomposition products</b>	None known

## 11 SECTION 11 : TOXICOLOGICAL INFORMATION

### **11.1 Information on toxicological effects**

<ul style="list-style-type: none"> <li>a) acute toxicity;</li> <li>(b) skin corrosion/irritation;</li> <li>(c) serious eye damage/irritation;</li> <li>(d) respiratory or skin sensitisation;</li> <li>(e) germ cell mutagenicity;</li> <li>(f) carcinogenicity;</li> <li>(g) reproductive toxicity;</li> <li>(h) STOT-single exposure;</li> <li>(i) STOT-repeated exposure;</li> <li>(j) aspiration hazard</li> </ul>	<ul style="list-style-type: none"> <li>(a) Rat, LD50 &gt;5.05 mg/kg body weight, practically non-toxic</li> <li>b) Rabbit, no irritation/corrosion was observed.</li> <li>(c) Rabbit, no eye damage was observed.</li> <li>(d) Guinea pig, buehler test: sensitizer.</li> <li>(e) Non-observed</li> <li>(f) Non-observed</li> <li>(g) Non-observed</li> <li>(h) Non-observed</li> <li>(i) Non-observed</li> <li>(j) Non-observed</li> </ul>
Information on likely exposure pathways	<p>Ingestion: Slight irritation possible. No known significant effects or critical hazards.</p> <p>Inhalation: Nasal irritation possible. No known significant effects or critical hazards.</p> <p>Skin Exposure: No known significant effects or critical hazards.</p> <p>Eye exposure: Slight irritation. No known significant effects or critical hazards.</p>
Symptoms related to the physical, chemical and toxicological characteristics	No known symptoms
Delayed and immediate effects as well as chronic effects from short- and long-term exposure	No known effect
Interactive effects	No data
Absence of specific data	No data
Mixtures	No data
Mixture versus substance information	<p>Mixture not containing substances subject to registration.</p> <p>No known adverse effects or symptoms resulting from exposure to the mixture or its components.</p>
Other information	Comply with good industrial hygiene practices

## 12 SECTION 12 : ECOLOGICAL INFORMATION

<b>12.1</b>	<b>Toxicity</b>	Not applicable. The active ingredient is naturally occurring and practically non-toxic, non-allergenic and non-pathogenic to fish, non-target insects, non-target plants and freshwater invertebrates.
<b>12.2</b>	<b>Persistence and degradability</b>	Not applicable

<b>12.3</b>	<b>Bioaccumulative potential</b>	Not applicable
	<b>Mobility in soil</b>	Not applicable
<b>12.4</b>		
<b>12.5</b>	<b>Results of PBT and vPvB assessment</b>	Not applicable
<b>12.6</b>	<b>Other adverse effects</b>	No data

### 13 SECTION 13 : DISPOSAL CONSIDERATIONS

<b>13.1</b>	<b>Waste treatment methods</b>	Product: Product residues may be spread in the field or composted in small quantities. Packaging: Empty packaging can be disposed of in household waste or in recycling bins.
	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

<b>14.1</b>	<b>UN number</b>	Non-hazardous transport
<b>14.2</b>	<b>UN proper shipping name</b>	Non-hazardous transport
<b>14.3</b>	<b>Transport hazard class(es)</b>	Non-hazardous transport
	<b>ADR</b>	Non-hazardous transport
	<b>IMDG</b>	Non-hazardous transport
	<b>OACI/IATA</b>	
<b>14.4</b>	<b>Packing group</b>	Non-hazardous transport
<b>14.5</b>	<b>Environmental hazards</b>	Non-hazardous transport
<b>14.6</b>	<b>Special precautions for user</b>	Non-hazardous transport
<b>14.7</b>	<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Non applicable/ Non-hazardous transport

### 15 SECTION 15 :REGULATORY INFORMATION

<b>15.1</b>	<b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
	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, none.
<b>15.2</b>	<b>Chemical safety assessment</b>	Evaluation not carried out

**Abbreviations and acronyms:**

ADR: European Agreement on the Transport of Dangerous Goods by Road

CASE NUMBER: Chemical Abstract Service number

EC50: Concentration that gives effect to 50% of the test population.

EC NUMBER: Identification number in ESIS (European Archives of Existing Substances)

CLP: EC Regulation 1272/2008

DNEL: Level calculated without effect

EmS: Emergency calendar

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

IATA DGR: International Air Transport Association Dangerous Goods Regulations

IC50: Immobilizing concentration of 50% of the test population.

IMDG: International Maritime Code for the Transport of Dangerous Goods

IMO: International Maritime Organization

INDEX NUMBER: Identification number VI Annex of the CLP

LC50: Lethal concentration 50% lethal concentration

LD50: Lethal dose 50%.

LEP: Occupational exposure level

PBT: Persistent, bioaccumulative and toxic according to REACH

PEC: Predicted environmental concentration

PEL: Predictable exposure level

PNEC: Predictable concentration without effects

REACH: EC Regulation 1907/2006

RID: Regulations concerning the International Transport of Dangerous Goods by Rail

TLV: Threshold limit value

PLAFUND TLV: Concentration that must not be exceeded at any time during the working exposure

TWA STEL: Short-term exposure limit

TWA: Weighted Average Exposure Limit

VOC: Volatile organic compound

vPvB: Very persistent and bioaccumulative according to REACH

**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)

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

16.1

16.2



**16.3 Indication of changes:**

Revision date: 02/03/2020

Previous version date: 18/07/2019

Version: 4

Modification sections 5.3, 7.2, 7.3

**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 contained herein is based on our knowledge of the product as of the date indicated (based on the safety data sheets for the active ingredients prepared by the manufacturer and other bibliographical data). It is given in good faith. In addition, the user's attention is drawn to the possible risks incurred 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.

It is the responsibility of our customers to observe the regulations in force.

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