

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

TrikoLogic

Date : 01/12/2006

Version No. 3

Review date: 03/09/2019

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

Product identifier

1.1 A. Product name: **TRIKOLOGIC**

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

TrikoLogic is a soil and plant auxiliary substance in compliance with European Regulation 2008/113/EC on organic farming, based on spores of the natural fungus *Trichoderma harzianum* T50. It improves the health and resistance of plants and strengthens root development.

Uses advised against:

Any use not specified in this section or in section 7.3
Use Descriptor System (REACH): not applicable

1.3 Details of the supplier of the safety data sheet

Supplier identification	Terra Aquatica Sarl (GHE)
Address	Route de Lectoure, 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**

1.4 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
	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** TrikoLogic
TrikoLogic does not contain any toxic chemicals.
TrikoLogic is a product based on spores of the natural fungus *Trichoderma harzianum* T50, it improves plant health, resistance 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.

4.1 Description of first aid measures

Following eye contact	Immediately flush eyes, including under the eyelids, with plenty of clean, clear water. Check if the victim is wearing contact lenses and if so, remove them. Consult a doctor if irritation appears or persists.
Following skin contact	Non-irritating. Wash thoroughly with soap and water.
Following ingestion	Do not induce vomiting. Rinse the mouth with water. If a person has swallowed this product and is conscious, give small amounts of water to drink. Call a doctor if adverse health effects persist or worsen.
Following inhalation	Rinse nose with fresh water. In case of breathing difficulties, consult a doctor as soon as possible.
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

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects:

No known effect

Signs/symptoms of overexposure:

No specific data

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5 SECTION 5 : FIREFIGHTING MEASURES

Extinguishing media

The product is not flammable.

Suitable extinguishing media:

5.1

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 from the substance or mixture

Given its flammability characteristics, the product does not present a fire risk under normal storage, handling and use conditions.

5.2

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.

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.

5.3

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:

5.4

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	Personal precautions: Avoid dust generation, ensure adequate ventilation and respiratory protection (see section 8). Avoid contact with skin and eyes. Do not eat, drink or smoke. Emergency responders will be equipped with personal protective equipment appropriate to the nature of the hazard. (See section 8).
For emergency responders	

Environmental precautions None required.

6.2

Methods and material for containment and cleaning up

6.3

For containment:	Sewer coverage
For cleaning up:	Collect the spilled product by mechanical means 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	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.

6.4

7 SECTION 7 : HANDLING AND STORAGE

Precautions for safe handling	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.
7.1	
Conditions for safe storage, including any incompatibilities	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. Store in areas with impermeable pavement. Avoid contact with strong oxidizing agents.
7.2	
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
		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	Hands : Not required but it is possible to wear safety gloves. Others : Not required
	Respiratory protection	Ensure adequate ventilation, especially in enclosed areas.
	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: White Greenish
Odour	No odour
pH	No pH when dry
pH in dispersion of 2g/l water at 20°C	6-8
Melting point	Not applicable
Freezing point	Not determined
Initial boiling point and boiling range	Not determined
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	0.7 g/cm ³
Solubility(ies) 20°C	Entirely soluble
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature	Up to 400 °C
Decomposition temperature	➤ 900°C
Viscosity	Not determined
Explosive properties	Non determined
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.
10.2	Chemical stability	TrikoLogic is stable at room temperature in closed packages and under normal storage and handling conditions at temperatures between 0 and 30°C.
10.3	Possibility of hazardous reactions	No risk of dangerous reactions under normal use and storage conditions.
10.4	Conditions to avoid	Prolonged exposure to temperatures above 30°C. Storage in a damp place.
10.5	Incompatible materials	Any substance acting on organic materials, fungicides and acids.
10.6	Hazardous decomposition products	None known

11 SECTION 11 : TOXICOLOGICAL INFORMATION

11.1	Information on toxicological effects	
	a) acute toxicity;	>50g/kg
	(b) skin corrosion/irritation;	
	(c) serious eye damage/irritation;	
	(d) respiratory or skin sensitisation;	Ingestion: No known significant effects or critical hazards.
	(e) germ cell mutagenicity;	Inhalation: No known significant effects or critical hazards.
	(f) carcinogenicity;	Skin Exposure: No known significant effects or critical hazards.
	(g) reproductive toxicity;	
	(h) STOT-single exposure;	Eye exposure: Slight irritation. No known significant effects or critical hazards
	(i) STOT-repeated exposure;	
	(j) aspiration hazard	
	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 known effect
	Absence of specific data	No data
	Mixtures	No data
	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	Not applicable
12.2	Persistence and degradability	Not applicable
12.3	Bioaccumulative potential	Not applicable
12.4	Mobility in soil	Not applicable

12.5	Results of PBT and vPvB assessment	Not applicable
12.6	Other adverse effects	No data

13 SECTION 13 : DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Product : Remains of the product 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

14.1	UN number	Non-hazardous transport
14.2	UN proper shipping name	Non-hazardous transport
14.3	Transport hazard class(es)	Non-hazardous transport
	ADR	Non-hazardous transport
	IMDG	Non-hazardous transport
	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 applicable/ 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	To our knowledge, none.
15.2	Chemical safety assessment	Evaluation not carried out / not applicable

16 SECTION 16 : OTHER INFORMATION

Abbreviations and acronyms:	ADR: European Agreement on the Transport of Dangerous Goods by Road
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16.1	<p>CASE NUMBER: Chemical Abstract Service number</p> <p>EC50: Concentration that gives effect to 50% of the test population.</p> <p>EC NUMBER: Identification number in ESIS (European Archives of Existing Substances)</p> <p>CLP: EC Regulation 1272/2008</p> <p>DNEL: Level calculated without effect</p> <p>EmS: Emergency calendar</p> <p>GHS: Globally Harmonized System of Classification and Labelling of Chemicals</p> <p>IATA DGR: International Air Transport Association Dangerous Goods Regulations</p> <p>IC50: Immobilizing concentration of 50% of the test population.</p> <p>IMDG: International Maritime Code for the Transport of Dangerous Goods</p> <p>IMO: International Maritime Organization</p> <p>INDEX NUMBER: Identification number VI Annex of the CLP</p> <p>LC50: Lethal concentration 50% lethal concentration</p> <p>LD50: Lethal dose 50%.</p> <p>LEP: Occupational exposure level</p> <p>PBT: Persistent, bioaccumulative and toxic according to REACH</p> <p>PEC: Predicted environmental concentration</p> <p>PEL: Predictable exposure level</p> <p>PNEC: Predictable concentration without effects</p> <p>REACH: EC Regulation 1907/2006</p> <p>RID: Regulations concerning the International Transport of Dangerous Goods by Rail</p> <p>TLV: Threshold limit value</p> <p>PLAFUND TLV: Concentration that must not be exceeded at any time during the working exposure</p> <p>TWA STEL: Short-term exposure limit</p> <p>TWA: Weighted Average Exposure Limit</p> <p>VOC: Volatile organic compound</p> <p>vPvB: Very persistent and bioaccumulative according to REACH</p>
16.2	<p>Key literature references and sources for data</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>
16.3	<p>Indication of changes:</p> <p>Version: 3 Modification: name change (BM becomes TrikoLogic)</p>
16.4	<p>Classification and procedure used to derive the classification for</p> <p>Non Applicable</p>

**mixtures according to
Regulation (EC)
1272/2008 [CLP]:
Note**

Product that can be used in organic farming in accordance with EEC regulation 2008/113/.

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

This safety data sheet has been prepared by Terra Aquatica (GHE) on the basis of its current knowledge (manufacturer's active ingredient safety data sheet and other bibliographic data).

The information describes the safety aspects of the product. They are not intended to guarantee specific properties.

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