

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

TrikoLogic

Date : 01/12/2006

Version No. 4

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 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.

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	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 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 <i>Trichoderma harzianum</i> 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	Wash immediately with plenty of water, keeping the eyelids well apart.
	Following skin contact	Wash thoroughly with soap and water.
	Following ingestion	Do not induce vomiting, seek medical attention immediately by showing the product label.
	Following inhalation	Rinse nose with fresh water.
	Self-protection of the first aider	Depending on the first aid setting, 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 giving first aid.
4.2	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
	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

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 case of continued combustion, caused by improper handling, storage or use, the following extinguishing media can be used: carbon dioxide (CO₂), foam, chemical powders, and in case of a large 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.

5.3 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.

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

Environmental precautions None required.

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 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

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.
Store in areas with impermeable pavement.
Avoid contact with strong oxidizing agents.

Specific end use(s)

7.3

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 Not applicable

8.1		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.
	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;	
	(e) germ cell mutagenicity;	
	(f) carcinogenicity;	
	(g) reproductive toxicity;	
	(h) STOT-single exposure;	
	(i) STOT-repeated exposure;	
	(j) aspiration hazard	
	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: No known significant effects or critical hazards. Eye Exposure: Mild 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 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

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

16.2

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

16.3

Indication of changes:

Revision date: 02/03/2020
Previous version date: 17/06/2019
Version: 4
Modification sections 5.3, 7.2, 7.3

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. It is given in good faith.

Furthermore, 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.

This safety data sheet has been compiled by Terra Aquatica (GHE) on the basis of its current knowledge (safety data sheet of the active ingredients compiled by the manufacturer and other bibliographical data).

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.