

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

Pro Roots

Date : 30/09/2013

Version No. 3

Review date: 02/10/19

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

Product identifier

1.1 A. Product name: **PRO ROOTS**

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

Relevant identified uses of the substance or mixture:

Pro Roots is an organic roots activator and growth stimulator that complies with the EC regulation on organic farming No. 834/2007.

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 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 (IK).

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	Pro Roots Pro Roots is a 100% organic root activator and growth stimulator based on Ascophyllum nodosum Algae.

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	Rinse eyes with clear water for about 15 minutes.
Following skin contact	Rinse thoroughly with water. Remove contaminated clothing. If the skin is red or puffy, if irritation persists, consult a doctor.
Following ingestion	Drink water to dilute the product (from 0.5L to 1L). If you take more than one teaspoon, mild diarrhoea may be caused by the action of enzymes in the stomach.
Following inhalation	Under normal conditions of use, inhalation is unlikely. In case of exposure move person to fresh air and if necessary, assist breathing. Seek medical attention if breathing difficulties appear/persist.
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 giving first aid. If clothing becomes contaminated with a chemical during first aid procedures, change clothing.

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 Pro Roots can cause mild diarrhoea due to the enzymatic process with intestinal bacteria, if ingested in large quantities or in concentrated form.

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

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 for a surrounding fire:
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 Given its flammability characteristics, the product does not present a specific risk of fire or explosion 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 dust, vapours or fumes released by the combustion of products.

5.3 Advice for firefighters Protective actions to be taken when fighting fires
Quickly isolate the area by evacuating all persons from the area near the incident 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 Special firefighting procedures: Keep cans away from the fire if it can be done safely. Fire can cause smoke or toxic gases. Firefighters must wear a mask with a closed-circuit breathing system and protective clothing and avoid contact with eyes or skin.
Approach the fire with a braced wind. If large quantities of product are involved, do not use a hose with fittings. Be careful of water flows resulting from firefighting. Do not discharge fire-extinguishing material into drains or sewers.

6 SECTION 6 : ACCIDENTAL RELEASE MESURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Ensure proper ventilation. Wear gloves and safety glasses to avoid stains or risk of splashing.

For emergency responders Workers will be equipped with personal protective equipment appropriate to the possible hazards.
(See section 8)

6.2 Environmental precautions

No particular precaution

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.

Do not put the spilled product in contact with combustible or incompatible materials. Cleaning personnel must wear equipment to protect skin and eyes. Small amounts of product can be mopped with inert, non-combustible materials such as sand or soil. These materials must then be placed in appropriate containers.

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

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

Provide adequate ventilation in areas where suspended particles develop.

7.1

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

Store in accordance with local regulations. Store in the original container, tightly closed, away from direct sunlight in a dry, cool and well-ventilated place away from incompatible materials (see section 10). Ideally, the storage temperature should be between 5°C and 40°C.

7.2

A temperature above 90°C can lead to thermal decomposition creating totally benign by-products, organic matter, carbonated water.

Close containers before and after each use to avoid sources of moisture or heat.

Keep containers upright to avoid risk of leaks. Keep in labelled containers, away from food products.

7.3	<p>Specific end use(s)</p> <p>No specific end uses.</p> <p>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.</p> <p>The ingredients may lose their effectiveness if the product is stored in a too hot place, also avoid temperatures below 5°C.</p>
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8 SECTION 8 : EXHIBITION CONTROLS/INDIVIDUAL PROTECTION

8.1	<p>Control parameters</p> <p>Not applicable</p> <p>Use good industrial hygiene practices.</p>
8.2	<p>Exposure controls</p> <p>Appropriate engineering controls</p> <p>Individual protection measures, such as personal protective equipment</p> <p>No particular control</p> <p>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.</p> <p>Personal protective equipment must be adapted to the risk, kept clean and properly maintained in accordance with the provisions of the Labour Code.</p> <p>Eye/face protection</p> <p>It is necessary to wear safety glasses that comply with the NF EN166 standard before handling any products to avoid risks of splashing.</p> <p>Skin protection</p> <p>Hands: Wear suitable protective gloves in case of prolonged or repeated contact with the product to avoid stains.</p> <p>Respiratory protection</p> <p>Use suitable chemical-resistant protective gloves in accordance with NF EN374.</p> <p>Ensure adequate ventilation, especially in enclosed areas. Respiratory protection device not required.</p> <p>Body protection</p> <p>Wear appropriate protective clothing if deemed necessary.</p> <p>After contact with the product, all soiled parts of the body must be washed.</p> <p>Environmental exposure controls</p> <p>No data available. Biodegradable product</p>

9 SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1	<p>Information on basic physical and chemical properties</p> <p>Appearance</p> <p>Physical state: all Pro Roots compounds are in aqueous solution.</p> <p>Color: Dark Brown</p> <p>Odour</p> <p>Lemon</p> <p>pH</p> <p>9-9.5</p> <p>Melting point</p> <p>Not applicable</p> <p>Freezing point</p> <p>-4°C</p> <p>Initial boiling point and boiling range</p> <p>103°C</p> <p>Flash point</p> <p>Not determined</p> <p>Evaporation rate</p> <p>Not determined</p> <p>Flammability (solid, gas)</p> <p>Non inflammable</p> <p>Upper/lower flammability or explosive limits</p> <p>Not applicable</p> <p>Vapour pressure</p> <p>Not determined</p> <p>Vapour density</p> <p>Not determined</p> <p>Relative density</p> <p>1.12</p> <p>Solubility(ies) 20°C</p> <p>Soluble, 995g/L</p>
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Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature	Not determined
Decomposition temperature	Not determined
Viscosity	60 m Pa-S (Brookfield)
Explosive properties	Not determined
Oxidising properties	Not determined
Refraction index	Not determined
Rotary power	Not determined

9.2

Other information

No other information

10 SECTION 10 : STABILITY AND REACTIVITY

10.1	Reactivity	Stable. No particular risk of reaction with other materials under normal conditions of use.
10.2	Chemical stability	Pro Roots is stable at room temperature in closed packages and under normal storage and handling conditions.
10.3	Possibility of hazardous reactions	No hazardous polymerization can be produced by any of these components No risk of dangerous reactions under normal use and storage conditions.
10.4	Conditions to avoid	No special conditions to avoid.
10.5	Incompatible materials	No specific data.
10.6	Hazardous decomposition products	Under normal storage and use conditions, no hazardous decomposition products should occur.

11 SECTION 11 : TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

a) acute toxicity; (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	No known toxicological effects
Symptoms related to the physical, chemical and toxicological characteristics	Ingestion: May potentially cause mild diarrhea if ingested in large amounts or in concentrated form. Inhalation: Unlikely route of exposure under normal conditions of use. Skin Exposure: No danger - wash with water. Eye Exposure: Mild irritation possible - wash with water.
Delayed and immediate effects as well as chronic effects from short- and long-term exposure	No known effect
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	Not applicable
12.2	Persistence and degradability	Biodegradable.
12.3	Bioaccumulative potential	Not determined. Biodegradable.
12.4	Mobility in soil	No data available. Biodegradable.
12.5	Results of PBT and vPvB assessment	No data available to date to the best of our knowledge
12.6	Other adverse effects	No data available to date to the best of our knowledge

13 SECTION 13 : DISPOSAL CONSIDERATIONS

	Waste treatment methods	Waste: Waste management is carried out without endangering human health and without harming the environment, including without creating a risk to water, air, soil, fauna and flora. Recycle or dispose of in accordance with current legislation, preferably by an approved collector or company.
13.1		Disposal of the product/packaging: 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 much 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	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

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

15.1		
	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

16 SECTION 16 : OTHER INFORMATION

16.1	Abbreviations and acronyms:	<p>ETA = Acute Toxicity Estimation</p> <p>CLP = Regulation 1272/2008/EC on classification, labelling and packaging of substances and mixtures</p> <p>DNEL = Derived no-effect dose</p> <p>DMEL = Derived no-effect dose</p> <p>EUH = Specific hazard statement CLP</p> <p>CPSE = Predicted no-effect concentration</p> <p>RRN = REACH registration number</p> <p>PTB = Persistent, Toxic and Bioaccumulative</p> <p>tPtB = Very persistent and very bioaccumulative</p> <p>bw = Body mass</p>
16.1	Key literature references and sources for data	<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>
16.2		<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> <p>EU REACH IUCLID5 CSR.</p> <p>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.</p> <p>IHS, 4777 Levy Street, St Laurent, Quebec HAR 2P9, Canada.Règlement (CE) n °</p>

16.3**Indication of changes:****Note**

1272/2008 Annexe VI.

Version: N° 3 - 02/10/2019

Modification: trade name change (G.H.Roots becomes Pro Roots)

Product that can be used in organic farming in accordance with EEC regulation N°834/2007

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 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.