

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

Pro Roots

Date : 01/09/2013

Version No. 3

Review date: 25/06/19

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

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|-------------------------|-----------------------------------|
| 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

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| 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 :

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| 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]

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| 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

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| 3.1 | Substances | Non applicable |
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| 3.2 | Mixtures Name | Pro Roots Pro Roots is a 100% organic root activator and growth stimulator based on Ascophyllum nodosum Algae, authorised by the EC standard on organic farming No. 834/2007. |
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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

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| Following eye contact | Do not allow the victim to rub their eyes or keep their eyes closed. Immediately flush eyes, including under the eyelids, with plenty of clean, clear water for at least 15 minutes. Check if the victim is wearing contact lenses and if so, remove them. If irritation occurs or persists, consult a doctor. |
| 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 | 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 to dilute the product (0.5L to 1L). The product can cause mild diarrhoea due to the enzymatic process with intestinal bacteria. Call a doctor if adverse health effects persist or worsen. |
| Following inhalation | Under normal conditions of use, inhalation is unlikely. If inhaled, move to fresh air. In case of breathing difficulties, consult a doctor as soon as possible. |

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| 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. If your clothing is contaminated with a chemical substance during first aid administration, 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 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 Note to the attending physician No known data |

5 SECTION 5 : FIREFIGHTING MEASURES

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| 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 (CO ₂), foam, chemical powders, and in the event of a widespread fire, also water spray. |
| 5.2 | Special hazards arising from the substance or mixture Inappropriate extinguishing media: In case of fire, do not use: Water jet 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 products. |
| 5.3 | Advice for firefighters <u>Protective actions to be taken when fighting fires</u> 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. <u>Appropriate protective equipment</u> 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. |

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| 5.4 | <p>Other information</p> <p>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.</p> |
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6 SECTION 6 : ACCIDENTAL RELEASE MESURES

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| 6.1 | <p>Personal precautions, protective equipment and emergency procedures</p> <p>For non-emergency personnel No action should be taken that involves an individual risk or in the absence of appropriate training. Ensure proper ventilation. Wear gloves and safety glasses to avoid stains or risk of splashing.</p> <p>For emergency responders Workers will be equipped with personal protective equipment appropriate to the possible hazards. (See section 8)</p> |
| 6.2 | <p>Environmental precautions No particular precaution</p> <p>Methods and material for containment and cleaning up</p> |
| 6.3 | <p>For containment: Sewer coverage</p> <p>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.</p> |
| 6.4 | <p>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.</p> |

7 SECTION 7 : HANDLING AND STORAGE

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| 7.1 | <p>Precautions for safe handling</p> <p>Avoid the formation of suspended particles and the dispersion of the product in the air.</p> <p>Use adequate ventilation in areas where suspended particles develop.</p> <p>Keep away from flames and sparks. Do not smoke. Keep away from heat sources and other sources of fire.</p> <p>Advice on professional hygiene in general:</p> <p>It is prohibited to eat, drink or smoke in areas where this product is handled, stored or used. It is recommended that staff wash their hands and face before eating,</p> |
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drinking or smoking. Remove contaminated clothing and protective equipment before entering a food court. See also section 8 for more information on hygiene measures.

7.2 **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 and 40 degrees C.

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

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 **Specific end use(s)**

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.

The ingredients may lose their effectiveness if the product is stored in a too hot place, also avoid temperatures below 5°C.

8 SECTION 8 : EXHIBITION CONTROLS/INDIVIDUAL PROTECTION

8.1 **Control parameters**

Not applicable

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.

Eye/face protection

Personal protective equipment must be adapted to the risk, kept clean and properly maintained in accordance with the provisions of the Labour Code.

Skin protection

It is necessary to wear safety glasses that comply with the NF EN166 standard before handling any products to avoid risks of splashing.

Respiratory protection

Hands: Wear suitable protective gloves in case of prolonged or repeated contact with the product to avoid stains.

Body protection

Use suitable chemical-resistant protective gloves in accordance with NF EN374.

Environmental exposure controls

Ensure adequate ventilation, especially in enclosed areas. Respiratory protection device not required.

Wear appropriate protective clothing if deemed necessary.

After contact with the product, all soiled parts of the body must be washed.

No data available. Biodegradable product

9 SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1 **Information on basic physical and chemical properties**

Appearance

Physical state: all Pro Roots compounds are in aqueous solution.

Color: Dark Brown

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| Odour | Lemon |
| pH | 9-9.5 |
| Melting point | Not applicable |
| Freezing point | -4°C |
| Initial boiling point and boiling range | 103°C |
| 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 | 1.12 |
| Solubility(ies) 20°C | Soluble, 995g/L |
| 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

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| 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. 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. |
| 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;
- In view of the available data, the classification criteria are not met.

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| (c) serious eye damage/irritation; | No known health damage resulting from exposure to the product. |
| (d) respiratory or skin sensitisation; | No known toxicological effects |
| (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: May potentially cause mild diarrhoea if ingested in large quantities or in concentrated form. Inhalation: unlikely route of exposure under normal conditions of use. No known significant effects or critical hazards. Skin Exposure: No known significant effects or critical hazards. Wash with water Eye exposure: Slight irritation possible. No known significant effects or critical hazards. 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

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|-------------|---|--|
| 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 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 | 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

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| 13.1 | 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. 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. |
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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

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| 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

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| 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

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

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| | | 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: | Version: N° 3 - 02/10/2019 Modification: name change (G.H.Roots becomes Pro Roots) |
| 16.4 | Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]: Note | Non Applicable 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.