



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

DualPart Grow Hard Water

Date : 01 Janvier 2008

Version No. 4

Review date: 03/01/2022

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

1.1 Product identifier

Product name: DUALPART GROW HARD WATER

1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant Identified Uses :
DualPart Grow Hard Water is a blend of mineral salts formulated and blended in proportions that ensure optimal nutrition for plants.
Uses not recommended: 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
Address 4, boulevard du Biopole 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	999
Fire and rescue services	999
Police	101
EU Emergency call line	112
Toxicological Information Centre ORFILA (INRS)	+33 01 45 41 59 59
Toxicological Information Centre South West	+33 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	H319 - Causes serious eye irritation
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 None

Warning statement P-Phrases (Reg. 1272/2008/CLP) P102 Keep out of reach of children

Additional hazard information (EU) None

2.3 Other hazards

Reg. 1272/2008/CLP None

3 SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Non applicable

3.2 Mixtures Trade Name DualPart Grow Hard Water

Ingredient name Non applicable

Mixtures classified as dangerous Non applicable

Description DualPart Grow Hard water is a mixture of mineral salts, formulated and blended in proportions that ensure optimal nutrition for plants. The exact nature of the salts as well as their proportions are a manufacturing secret. However, they are derived from: Potassium Nitrate, Magnesium Chloride, Ammonium Nitrate, Potassium Carbonates

Chemical name	Concentration (%)	CAS Number
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Ammonium nitrate	2-5	6484-52-2
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Potassium nitrate	10-20	7757-79-1
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Calcium nitrate	2-5	10124-37-5
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4 SECTION 4 : FIRST AID MEASURES

In general, if in doubt or if symptoms persist, seek medical attention. Do not give anything by mouth to an unconscious person.

4.1 Description of first aid measures

Following eye contact	Check for and remove any contact lenses. Wash immediately with plenty of water, keeping the eyelids well apart, and consult a specialist.
Following skin contact	Wash with plenty of soapy water. Remove impregnated clothing.
Following ingestion	Do not induce vomiting. Rinse mouth with water and drink small amounts of water if conscious. Seek medical attention and show the product label if symptoms develop.
Following inhalation	Move the victim to fresh air. Keep her warm and at rest. In case of breathing difficulty contact a doctor.
Self-protection of the first aider	Depending on the first aid setting, wear appropriate protective equipment including a mask or filtered respirator and, if necessary, operate in the presence of another co-worker. Always wear protective gloves and a resuscitation mask in case of artificial respiration. Wash hands thoroughly after giving first aid. If your 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
	No known effects
4.3	Indication of any immediate medical attention and special treatment needed
	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

5 SECTION 5 : FIREFIGHTING MEASURES

5.1	Extinguishing media	<p>The product is not flammable. Fire hazard low due to the flammability characteristics of the product under normal storage, handling and use conditions.</p> <p><u>Suitable extinguishing media:</u></p> <p>Use an extinguishing agent suitable for the surrounding fire or 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.</p> <p><u>Inappropriate extinguishing media:</u></p> <p>In case of fire, do not use: Water jet</p>
5.2	Special hazards arising from the substance or mixture	<p>Due to its flammability characteristics, the product does not contain a fire hazard under normal conditions of storage, handling and use.</p> <p>A fire in the surrounding space will often produce thick black smoke. Exposure to compositional products may result in health hazards. Do not breathe fumes.</p> <p>Decomposition products may include the following materials:</p> <p>oxides of nitrogen</p> <p>sulphur oxides</p> <p>phosphorus oxides</p> <p>metal oxide / metal oxides</p> <p>Fire water contaminated with this product should be contained and prevented from being discharged to a watercourse or sewer.</p>
5.3	Advice for firefighters	<p><u>Protective actions to be taken when fighting fires</u></p> <p>Rapidly isolate the site by evacuating all persons from the area near the incident in case of fire.</p> <p>Do not take any action involving a personal risk or in the absence of adequate training. Keep</p>

containers away from fire if it can be done without risk. Use water or water spray to keep containers exposed to fire cool.

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.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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

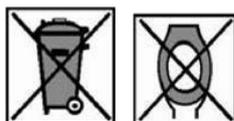
For non-emergency personnel

No action should be taken that involves an individual risk or in the absence of appropriate training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

For emergency responders

If necessary, responders will be equipped with appropriate personal protective equipment. (See section 8)

6.2 Environmental precautions



Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

For containment:

Sewer coverage

For cleaning up:

Gather up the spilled product by mechanical means and remove the remains by water jets. Provide sufficient ventilation of the spillage area. Contaminated material must be disposed of in accordance with point 13.

6.4 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.

7 SECTION 7 : HANDLING AND STORAGE

7.1	Precautions for safe handling	<p>Avoid formation of suspended particles and dispersion of the product in the air.</p> <p>Provide adequate ventilation in areas where suspended particles develop.</p> <p>Keep away from flames and sparks. Do not smoke. Keep away from heat and other sources of fire.</p> <p>Do not eat, drink or smoke in work areas.</p> <p>Wash hands after each use.</p>
7.2	Conditions for safe storage, including any incompatibilities	<p>Ensure adequate local ventilation or exhaust.</p> <p>Store container upright, tightly closed in a cool, dry, well-ventilated place.</p> <p>Close containers before and after each use to avoid sources of moisture or heat. Store in labelled bottles.</p> <p>Store in waterproof paved areas if possible.</p>
7.3	Specific end use(s)	<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>

8 SECTION 8 : EXHIBITION CONTROLS/INDIVIDUAL PROTECTION

8.1	Control parameters	<p>Not applicable</p> <p>Use good industrial hygiene practices.</p>
8.2	Exposure controls	
	Appropriate engineering controls	No special controls. Good general ventilation should be enough to control worker exposure to airborne contaminants.
	Individual protection measures, such as personal protective equipment	<p>Use individual protection 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 compliance with the provisions of the labour code.</p>
	Eye/face protection	It is necessary to wear protective glasses in accordance with the NF EN166 standard before handling chemicals.
	Skin protection	<p>Hands: Wear suitable protective gloves in case of prolonged or repeated contact with the product.</p> <p>Use appropriate chemical-resistant protective gloves in accordance with NF EN374.</p>
	Respiratory protection	Ensure adequate ventilation, especially in enclosed areas.
	Body protection	<p>Wear appropriate protective clothing.</p> <p>After contact with the product, all parts of the body that have been in contact with the product must be washed.</p>
	Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

9 SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information on basic physical and chemical properties	
	Appearance	<p>Physical state: All DualPart Grow Hard water compounds are in liquid solution.</p> <p>Colour: yellowish-greenish</p>
	Odour	None
	pH	3.74
	Melting point	Not available
	Freezing point	Not available

Initial boiling point and boiling range	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Upper/lower flammability or explosive limits	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	1.12
Solubility(ies) 20°C	Entirely Soluble
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available
Refraction index	Not available
Rotary power	Not available

9.2

Other information

No other information

10 SECTION 10 : STABILITY AND REACTIVITY

10.1	Reactivity	No specific reactivity test data are available for this product or its components in normal conditions of use.
10.2	Chemical stability	DualPart Grow Hard Water 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 under normal storage and handling conditions.
10.3	Possibility of hazardous reactions	Pas de risque de réactions dangereuses dans des conditions normales d'utilisation et d'entreposage.
10.4	Conditions to avoid	No special conditions to avoid. Comply with usual precautionary practices regarding chemicals.
10.5	Incompatible materials	DualPart Grow Hard Water contains elements that are powerful oxidizers that can react with strong bases to release ammonium. It can also react with powerful reducing agents.
10.6	Hazardous decomposition products	At very high temperatures, decomposition products are formed: phosphorus oxide, magnesium oxide, potassium oxide(s), carbon monoxide and sulphur oxide(s).

11 SECTION 11 : TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

a) acute toxicity

Ingredient name	Result	Species	Dose	Exposure
Ammonium	LD50 Oral	Rat	2217 mg/kg	Not applicable
nitrate	LD50 Oral	Rat	2.000 - 5.000 mg/kg	Not applicable

Potassium nitrate	LD50	Rat	> 5,000 mg/kg	Not applicable
	Cutaneous	Rat	500 mg/kg 423 Acute oral toxicity - Acute toxicity	Not applicable
Calcium nitrate	LD50 Oral	Rat	class method	Not applicable
	L50D		200mg/kg	
	Cutaneous			

(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	There is no data available.			
	Ingestion: No known significant effects or critical hazards.			
	Inhalation: No known significant effects or critical hazards.			
	Skin Exposure: Mild irritation. 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 significant effects or critical hazards.			
Interactive effects	No known significant effects or critical hazards.			
Absence of specific data	No known significant effects or critical hazards.			
Mixtures	No known significant effects or critical hazards.			
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 constituent substances.			
Other information	No known significant effects or critical hazards.			

12 SECTION 12 : ECOLOGICAL INFORMATION

12.1 Toxicity

Product/ingredient	Result	Species	Exposition
Ammonium nitrate	Chronic NOEC 6-12 mg/L - Fresh Water	Cladocera Crustaceans	21 hours
Potassium nitrate	Acute LC50 1.378 mg/L -Fresh water	Daphnie	48 hours
	OECD 203		
	Acute EC50 490 mg/L -Fresh water	Algae	240 hours
	Acute EC50 > 1,700 mg/l-Fresh water		

12.2 **Persistence and degradability** No data available to date to the best of our knowledge

12.3 **Bioaccumulative potential** No data available to date to the best of our knowledge

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** There is no data available.
- 12.6 **Other adverse effects** No known significant effects or critical hazards.

13 SECTION 13 : DISPOSAL CONSIDERATIONS

- Waste treatment methods** Do not flush to sewers or waterways.
- 13.1 **Waste:** Waste management shall be carried out without endangering human health and without harming the environment, and in particular without creating a risk to water, air, soil, fauna and flora.
- Recycle or dispose of in accordance with current legislation, preferably by a licensed collector or company.
- Disposal of the product/packaging:** Disposal into sewers or waterways is prohibited. 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.
- DualPart Grow Hard Water can be disposed of as you would any other industrial fertilizer. Follow local legislation.
- Waste codes / waste designations according to Law:** 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** Not regulated. Non-hazardous transport
- 14.2 **UN proper shipping name** Not regulated. Non-hazardous transport
- 14.3 **Transport hazard class(es)** Not regulated. Non-hazardous transport
- ADR
IMDG
OACI/IATA** Not regulated. Non-hazardous transport
- 14.4 **Packing group** Not regulated. Non-hazardous transport
- 14.5 **Environmental hazards** None
- 14.6 **Special precautions for user** Not regulated. Non-hazardous transport
- 14.7 **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not regulated. 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	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>
16.2	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> <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	Indication of changes:	<p>Date of revision: 03/01/2022</p> <p>Previous version date: 17/02/2020</p> <p>Version :4</p> <p>Modification: Section 1.3, Company name.</p>
16.4	Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:	<p>The indicated mixture does not require an SDS according to the REACH requirements. This sheet is for information purposes only.</p> <p>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 in this safety data sheet has been compiled by Terra Aquatica on the basis of its current knowledge (safety data sheet for the active ingredients compiled by the manufacturer and other bibliographical data) as of the date indicated. It is 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</p>
	Note	

created. The recipient must ensure that he is not liable for anything other than what is stated in the texts other than those mentioned.

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.