

1. Identification of the substance/preparation and company

Trade name: Natural Power Root Stimulator
 Supplier details: Advanced Hydroponics of Holland
 Hornweg 316
 NL-1432 GT Aalsmeer
 Tel.: +31 297 363404
 Fax : +31 297 363401

In emergency, information can be obtained from:
 Dr. ir. N.C. Stutterheim. +31 (0)6 22698853

2. Composition / Information on constituents

Filtered water extract made from:

10% (w/w) *Fucus vesiculosus* (seaweed)
 10% (w/w) *Ascophyllum nodosum* (seaweed)
 10% (w/w) Fishmeal
 10% (w/w) Humic- and Fulvic acids CAS 1415-93-6
 < 0.3% (w/w) Formic acid

Ec (mS/cm) 7.5 - 8.5
 pH-H₂O 4

| | mmol /l | mg/l | | μmol/l | μg/l |
|------------------|---------|------|----|--------|------|
| NH ₄ | 9.5 | 171 | Fe | 53.0 | 2960 |
| NO ₃ | 0.4 | 25 | Mn | 8.0 | 440 |
| P | 1.8 | 54 | Zn | 14.0 | 915 |
| K | 28.8 | 1126 | B | 22.0 | 238 |
| Ca | 4.3 | 172 | Cu | 2.7 | 172 |
| Mg | 1.8 | 44 | Mo | 0.1 | 10 |
| SO ₄ | 57.9 | 5562 | | | |
| Si | 0.4 | 11 | | | |
| HCO ₃ | 61.3 | 3739 | | | |
| Na | 33.4 | 768 | | | |
| Cl | 6.5 | 230 | | | |

3. Potential hazards

Description of hazard:

None

Special hints concerning hazards for the human and environment:

So far as the usual regulations of industrial hygiene are adhered to, the product handling does not involve any appreciable risk. Neither involves the product any risk of fire or explosion.

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4. First aid measures

General:

Inhalation:

If the product has come into contact with the skin:

If the product has come into contact with the eyes:

If the product is ingested:

Instruction for the physician:

General instructions are not necessary.
Avoid extensive inhalation, although no adverse effects from inhalation have been observed or reported.
Wash affected area with water and soap.
Rinse the eyes with lukewarm water, with eyelid opened.
Keep cool. Consult a physician and make this Safety Data Sheet available.
Specific measures to be taken are not known or documented. Carry out a symptomatic therapy.

5. Fire-fighting measuring

Not applicable because the product is not inflammable.

6. Measures to be taken in case of unintentional release

Personal precautionary measures:

Cleaning/picking-up method:

None

Vacuum or sweep up large quantities of the material and dispose according local regulations.

7. Handling and storage

Handling:

Storage:

When the products is handled in unpacked condition, its quality or purity may be impaired. Agrobio Products disclaims any liability once the original package has been opened.
Store the product in a cool place protected from frost. If not used, keep the container closed. The plastic used as container materials are resistant (HDPE).

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8. Exposure control and personal protective equipment

General protective and hygienic measures: Wash your hands after the work and before the breaks. Observe the rules of industrial hygiene.

Respiratory protection: During spraying use appropriate masks

Hand protection: Wear rubber protective gloves to avoid a repeated contact with the skin.

Eye protection: Wear protective goggles in case of potential contact with the eyes, e.g. by splashing, spraying, etc.

Body protection: Wear suitable work clothing if there is a risk of splashing or in case of potential contact with the body.

9. Physical and chemical properties

Appearance:

Shape:

Liquid

Odor:

Atypical

Safety data

Change of state:

Value/Range

Unit

N.A.

Boiling point:

100

°C

Melting point:

N.A.

Flash point:

N.A.

Inflammability:

N.A.

Explosion hazard:

N.A.

Self-ignition:

N.A.

Fire-promoting properties:

None

Vapour pressure at 20 °C

2.34E3

Pa

Density:

1

kg dm⁻³

Solubility in water:

Soluble

Solubility in organic solvents:

Soluble

pH value:

4

Viscosity at 20 °C:

1E-3

Pa s

Thermal conductivity at 20 °C:

0.60

W m⁻¹ K⁻¹

Specific electrical resistance:

0.125

cm/mS

Material Safety Data Sheet (MSDS) acc, to Guideline 93/112/EC

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10. Stability and reactivity

Conditions to be avoided:

Once opened, the product has limited storability

Substances to be avoided:

None

Hazardous decomposition products:

None

11. Toxicological information

Acute toxicity:

Assessment based on raw materials:

The preparation itself has not been tested. Exposure quantities are significantly below acute toxicity limits even when complete absorption is assumed.

Experience gained in practice; effects on humans:

No adverse health effect has been observed or reported.

Inhalation:

No adverse health effect has been observed or reported.

Ingestion:

No adverse health effect has been observed or reported.

Skin:

Some skin irritation is possible in case of continuous or repeated contact with the skin.

Eyes:

Direct contact with the surface of the eye may cause irritation. Eye protection is then recommended

12. Ecological information

This product is dissolves in water. Ecologically sound, if applied at recommended doses.

13. Instruction for disposal

Recommendation:

Recycling through composting should be given preference over disposal. If recycling is not possible, the product should be disposed according to the locally valid laws on waste disposal and regulations (the competent authorities should be able to give the necessary information).

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14. Transport information

No special instructions. The product is from natural origin. No ADR, UN, CAS or Class numbers required. TARIC-code: 3101 0000 00.

16. Other data

None



Material Safety Data Sheet for Natural Power Products

GENERAL INFORMATION

Product Name: **Advanced Natural Power Root Stimulator**
Date revised: 20-08-2009
Manufactured by: Advanced Hydroponics of Holland B.V.
Oosteinderweg 303-B
1432 AW Aalsmeer
The Netherlands
info@advancedhydro.com

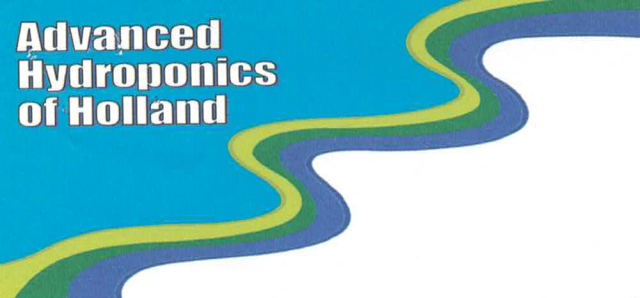
Advanced Natural Power Root Stimulator is a 100% natural extract based on a mix of different seaweeds with root growth stimulating properties, thus promoting a quick start of the growth cycle

Advanced Natural Power Root Stimulator is not a fertilizer, it is a so-called biostimulant. It does not contain micro-organisms.
At very low concentrations, biostimulants improve essential biochemical processes in plant and soil, thus improving plant growth and resistance to stress. Biostimulants are thus not a replacement for fertilizers, dung or other sources of minerals, they just allow the plant to perform better.

This cold extracted product is not amended with minerals like many other 'green' extracts and thus it contains mainly organic compounds like aminoacids, enzymes, auxins, cytokinins, gibberellins, betaines, alginates, various sugars, etc.

At low levels of application the extract strongly stimulates initial growth and development of young plants through a remarkable positive effect on root growth and root health. Plant nutrient uptake improves with the application of the extract and protein, carbohydrate and chlorophyll production is enhanced.

In the Netherlands, **Advanced Natural Power Root Stimulator** is successfully used in professional intensive indoors and outdoors horticulture (vegetables,



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the Netherlands

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fruits, bulbs, flowers), on recreation areas (golf, soccer, parks) and in normal and landscape gardens.

Ingredients

Mixture of specific seaweeds

Form

Finely filtered solutions with pH 4.5 - 5.5

Function

Stimulation of root and initial shoot growth

Application methods

Spraying, application through irrigation systems or soaking (roots, seeds)

Dosage

Foliar application: first application 10-20 L/ha, following applications 5 L/ha

Irrigation system: first application 20 L/ha, following applications 10 L/ha

Soaking: Use a dilution of 1:100 (1%). Soak seeds for several hours.

Application interval

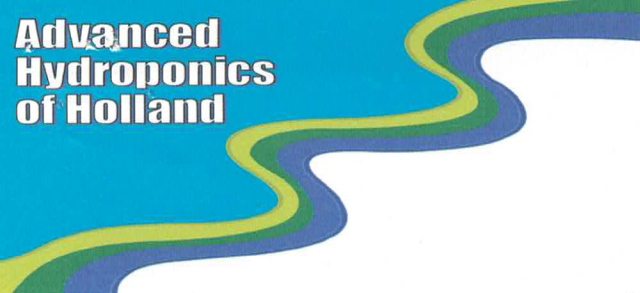
Bi-weekly during initial growth phase (root growth)

Package

0,25 / 0,5 / 1 and 5 Litre bottles/can.

Storage

As this is a 100% natural product, storability is strongly reduced once the can is opened.



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Guaranteed analysis Advanced Natural Power Root Stimulator in a 1:2 CaCl₂ extract

| | |
|------------|-----------|
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| pH-KCl | 4,5 - 5,5 |

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April 2011

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Legislation:

All compounds in this product are allowed for use in organic agriculture according EU regulation 2092/91 Annex II