

### 1. Identification of the substance/preparation and company

Trade name: Natural Power Final Solution  
 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) Cane molasses
- < 0.3% (w/w) Formic acid

Ec (mS/cm) 10 - 12  
 pH-H<sub>2</sub>O 4

	mmol /l	mg/l		µmol/l	µg/l
NH <sub>4</sub>	4.9	88	Fe	44.0	2457
NO <sub>3</sub>	0.4	25	Mn	13.0	714
P	1.03	32	Zn	11.0	719
K	34.2	1337	B	37.0	400
Ca	3.2	128	Cu	2.9	184
Mg	1.6	39	Mo	0.1	10
SO <sub>4</sub>	80.3	77.14			
Si	0.24	7			
HCO <sub>3</sub>	45.3	5514			
Na	31.0	1000			
Cl	10.2	386			

### 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.

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

**Date: 17.06.2006**

**page 2 of 5**

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**4. First aid measures**

<i>General:</i>	General instructions are not necessary.
<i>Inhalation:</i>	Avoid extensive inhalation, although no adverse effects from inhalation have been observed or reported.
<i>If the product has come into contact with the skin:</i>	Wash affected area with water and soap.
<i>If the product has come into contact with the eyes:</i>	Rinse the eyes with lukewarm water, with eyelid opened.
<i>If the product is ingested:</i>	Keep cool. Consult a physician and make this Safety Data Sheet available.
<i>Instruction for the physician:</i>	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**

<i>Personal precautionary measures:</i>	None
<i>Cleaning/picking-up method:</i>	Vacuum or sweep up large quantities of the material and dispose according local regulations.

**7. Handling and storage**

<i>Handling:</i>	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.
<i>Storage:</i>	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**

	<b>Value/Range</b>	<b>Unit</b>
<i>Change of state:</i>	N.A.	
<i>Boiling point:</i>	100	°C
<i>Melting point:</i>	N.A.	
<i>Flash point:</i>	N.A.	
<i>Inflammability:</i>	N.A.	
<i>Explosion hazard:</i>	N.A.	
<i>Self-ignition:</i>	N.A.	
<i>Fire-promoting properties:</i>	None	
<i>Vapour pressure at 20 °C</i>	2.34E3	Pa
<i>Density:</i>	1	kg dm <sup>-3</sup>
<i>Solubility in water:</i>	Soluble	
<i>Solubility in organic solvents:</i>	Soluble	
<i>pH value:</i>	4	
<i>Viscosity at 20 °C:</i>	1E-3	Pa s
<i>Thermal conductivity at 20 °C:</i>	0.60	W m <sup>-1</sup> K <sup>-1</sup>
<i>Specific electrical resistance:</i>	0.125	cm/mS

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**Date:** 17.06.2006

**page 4 of 5**

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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:* The preparation itself has not been tested.  
*Assessment based on raw materials:* 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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**page 5 of 5**

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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 Final Solution**  
*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 Final Solution** stimulates the reproductive growth of fruits and vegetables and can be used for increasing bacterial soil life.

**Advanced Natural Power Final Solution** 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.

**Advanced Natural Power Final Solution** is a multi-compound extract derived from several seaweed-species enriched with complexed carbohydrates. The extract especially serves to increase the flow of assimilates to ripening fruits and vegetables resulting in a better fill rate and thus in higher yields. Applied to the soil, **Advanced Natural Power Final Solution** is a real initiator of bacterial soil life. Soil bacteria are essential to maintain healthy soils.

In the Netherlands, **Advanced Natural Power Final Solution** is successfully used in professional intensive indoors and outdoors horticulture (vegetables, fruits, bulbs, flowers).

### **Ingredients**

Extracts from several seaweed species amended with complexed carbohydrates.



**Physical state**

Finely filtered solutions with pH 4.5 - 5.5

**Function**

To increase reproductive growth and yields

To stimulate and maintain soil bacteria.

**Application methods**

Spraying or application through irrigation systems

**Application interval**

Bi-weekly during the reproductive growth phase for increasing reproductive growth bi-weekly during the entire growth phase for soil maintenance.

**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.

**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

**Guaranteed analysis Advanced Natural Power Final Solution in a 1:2  $\text{CaCl}_2$  extract**

<b>Ec (mS/cm)</b>	10 – 12
<b>pH-KCl</b>	4,5 – 5,5

	mmol/l	$\mu\text{mol/l}$	mg/l	$\mu\text{g/l}$
<b>NH<sub>4</sub></b>	4.9		88	
<b>NO<sub>3</sub></b>	0.4		25	
<b>P</b>	1.03		32	
<b>K</b>	34.2		1337	
<b>Ca</b>	3.2		128	
<b>Mg</b>	1.6		39	
<b>SO<sub>4</sub></b>	80.3		7714	
<b>Fe</b>		44		2457
<b>Mn</b>		13		714
<b>Zn</b>		11		719
<b>B</b>		37		400
<b>Cu</b>		2.9		184
<b>Mo</b>		0.1		10
<b>Si</b>	0.24		7	
<b>HCO<sub>3</sub></b>	45.3		5514	
<b>Na</b>	31.0		1000	
<b>Cl</b>	10.2		386	

**April 2011**

*Advanced Hydroponics of Holland B.V.*

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Email: info@advancedhydro.com  
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**Legislation:**

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