

### Purple is the new green: Growcoon for hydroponic cultivation systems

### **Enhancing cultivation**

As the use of hydroponic systems has increased considerably in recent years, growers are looking for additional solutions that will further improve plant cultivation in water.

The Growcoon is now the must-have system for hydroponic cultivation processes. Yielding numerous benefits, it speeds up the cultivation of high quality plants.

### Press pot or plug

When working with a hydroponic system, young plants are required that have been raised either in a press pot or in a plug tray. Generally, plugs are strongly favoured, mainly because more growing media are needed for press pots than for plugs which need only be filled loosely.

#### No limits

The Growcoon combines the stable open net structure of a conventional mesh pot with a loosely filled, non-compacted substrate. This results in a perfect root environment for young plants and leads to faster growth – in some cases shortening growing time by up to three days.

There are no limitations that compromise root growth; no plastics have to be cut off, and the system water has no impairing effects, because the Growcoon does not absorb liquids. The Growcoon, including the plant's root ball, can be disposed of as green waste, or be delivered together with the plant to customers.



### Immediate improvements for hydroponics

### Better root development

- Fast and unhindered rooting through the open net structure
- The open net structure allows a higher oxygen exchange stimulating a strong root growth

### Top plant quality

- Shorter cultivation cycles
- Highly uniform plant growth
- Better establishment of young plants after transferring into the hydroponic system

#### High flexibility

- Applicable in both Deep Floating System (DFS) and Nutrient Film Technique (NFT)
- Various sizes available to fit in any hydroponic system

### **High stability**

- Perfectly stable plugs under wet growing conditions
- No contamination of the system water by the loosely filled substrate

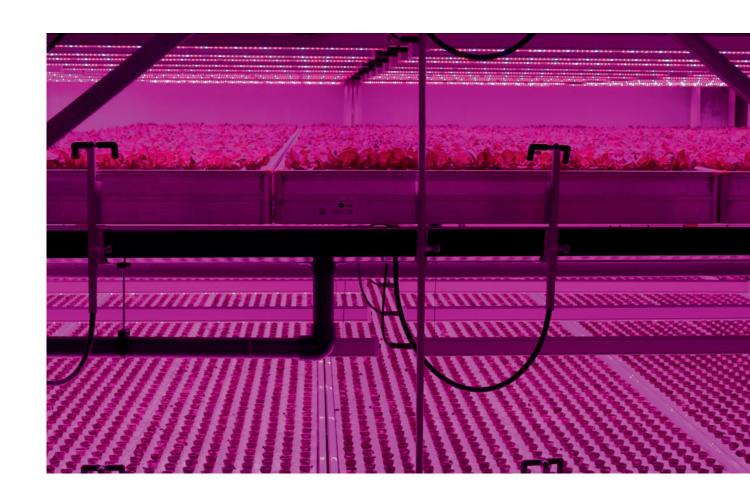
### Impressive efficiency

- Easy handling with automatic dispenser system
- Optimal plug stability for automatic planting and spacing

### Approved for organic growing

- Based on biodegradable polymers
- No harmful residues
- No pollution of crops with harmful substances
- Safe for plants, humans and environment
- SKAL listed, complies with the EU regulation for organic cultivation





# There is a perfectly fitting Growcoon for each hydroponic system.

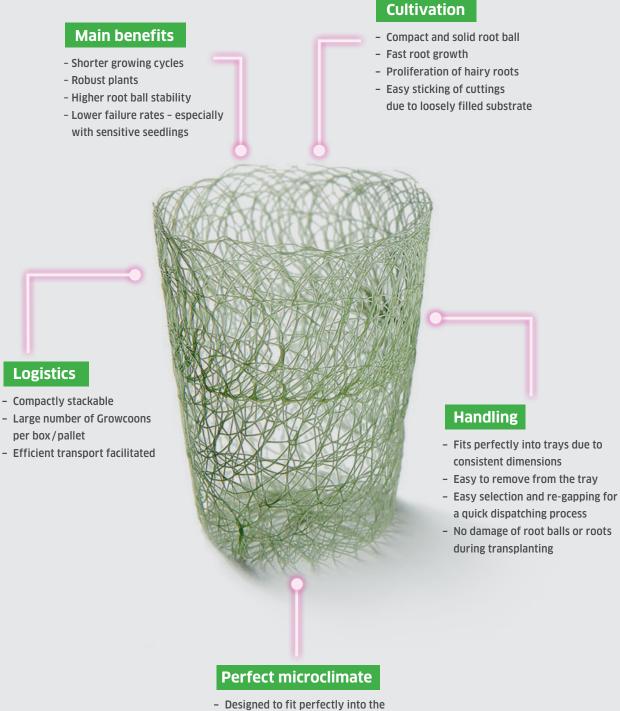
To learn more about the Growcoon range for hydroponics please look at www.klasmann-deilmann.com/en/growcoon







### Numerous benefits with the Growcoon



- tray cells
- The conical shape allows an extra oxygen buffer between Growcoon and tray cell
- Open net structure
- Use of loosely filled substrate



### Systematic solutions with the Growcoon

### What is Growcoon

Growcoon is a biodegradable plug with a stable but flexible open net structure. The Growcoon forms a stable root ball when used in combination with a high-quality seedling substrate.

#### **Effective growing**

Growcoon is the optimal system for all types of propagation methods. It proves to be particularly effective in sowing, rooting of cuttings, grafting and growing-on of young plants from tissue culture as well as in vertical farming and hydroponic systems.

### Many sizes

The Growcoon is available in many different standard sizes and suitable for all common tray sizes. In addition, there is a special Growcoon range for hydroponics. So the Growcoon can be used in all established propagation systems and with different trays. Moreover, special sizes can be produced on request.

### Special substrates for hydroponics

Klasmann-Deilmann has developed a range of growing media especially suitable for the use of Growcoon in hydroponic systems.

#### Special dispenser

We recommend a dispenser specially designed for the Growcoon. The dispenser is located upstream from the tray-filling machine and places the Growcoons automatically in trays. Alternatively, this can be done manually as well.

Growcoons are delivered compactly stacked in boxes. The dispenser de-stacks the Growcoons automatically and places a full row of Growcoons along the width of the tray.

### Advantages of the dispenser:

- Automated de-stacking and placing of Growcoons in the tray
- Designed for different sizes of Growcoons thanks to the interchangeable dispenser unit
- Simple operation
- The dispenser can be included easily in your tray filling line
- High capacity, between 10,000 and 50,000
   Growcoons per hour



## Combined excellence: Growing Media and Growcoon

### Opening up a new era

More and more growers are switching to hydroponics for cultivating various vegetable crops, a trend caused by an increasing demand for safe food and residue-free cultivation. Currently, hydroponic systems are mainly used for growing leafy vegetables and herbs, but applications for other vegetables, for cut flowers and other crops are also being investigated intensively.

### **Special substrates for hydroponics**

Klasmann-Deilmann is the world's leading producer of growing media for commercial horticulture. Based on our experience with all kinds of cultivation systems, our wide substrate range offers tailor-made solutions for the use of Growcoon in hydroponics. All substrates haven proven themselves for the cultivation of vegetable young plants, leafy vegetables, herbs and many other crops.













Substrate

**Tray Substrate** Growcoon

**Plug Mix** Extra Plus TS 1 fine 0.7kg 0:17:27

380

TS 1 fine **Organic propagation** 

Recipe-No.

394

402

Perlite (1 - 7.5 mm)

Perlite (1 - 7.5 mm)

Composition

Perlite (1 - 7.5 mm) White sod peat (1-7 mm)

White peat

(0 - 5 mm)

White peat (0 - 5 mm)

**U48** 

Coir (buffered)

White sod peat (1-7 mm)

> White peat (0 - 5 mm)

White peat (0 - 5 mm)

5.7

5.7

pH-value (H₂O) Fertilisation (g/l)

0.75

5.8

0.7

6.0

none

Extra trace elements

0.7

Wetting agent

Hydro S

Hydro S

Hydro S

Vegetable young

Structure

Fine

Fine

Vegetable young plants, Ornamental young plants. Seedling substrate without nitrogen ferti-

lisation. To be used with nitrogen fertilisers or liquid feeding.

Extra fine

Extra fine

Use for

Vegetable young plants, Ornamental young plants. Ideal for use in combination with the Growcoon system.

Vegetable young plants, Ornamental young plants. Ideal for use in combination with the Growcoon system.

plants, Ornamental young plants. Organic base substrate to be used with organic fertilisers or liquid feeding. Approved by OMRI for organic cultivation.







In addition to Klasmann-Deilmann's International Sales Conditions (for use in US business), please note that you will be charged separately for all duties and taxes at cost.



The Growcoon is a biodegradable product. The Growcoon's natural degradation process begins as soon as it encounters organic substances, that may contain naturally occurring soil fungi and bacteria. The conditions, the Growcoon is exposed to determine the speed and the nature of the degradation process. Various cultivation and process-related factors such as pH, EC, moisture, temperature, and storage can affect the functional shelf life of Growcoon. In order to prevent the natural degradation process from starting during storage, it is absolutely necessary to store the Growcoon in a dry and clean place and protect it from direct sunlight. Temperatures above 40 degrees (104 degrees Fahrenheit) must be avoided. Growcoon is TÜV certified, certificates are available on request.

