

GROW SMARTER by evaluating and comparing the bottom-line numbers.

Before purchasing your future growing media, consider the following differences between Grodan Rockwool and soil or peat based potting mixes. By choosing to grow your plants in Grodan Rockwool you can save money, water, space and nutrients.

Grodan Rockwool	Soil/Peat mixes
COMPACTION COMPARISON	
GRO-BLOCKS: 0% GRO-SLABS™: 0% GROW-CUBES: 8-10%	Plain 'ol soil mix: 25-40%
WATER SAVING COMPARISON	
Up to 75% water savings (recirculation is possible)	0% water savings (drain to waste)
COST COMPARISON	
Costs \$3.71 in media to grow a 3-4' plant in a HUGO™ block	Costs about \$9.50* of a leading soil brand to grow a 3-4' plant in a five gallon pot
WEIGHT COMPARISON	
Requires about 0.5 lbs of media to grow a 3-4' plant in HUGO block	Requires about 10-12 lbs. of a leading soil brand to a grow a 3-4' plant in a five gallon pot
NUTRIENT BLOCKAGE COMPARISON	
In Grodan, 0% CEC (Milli-Eq/100 grams) : 0**	In leading soil mix, 20-40% CEC (Milli-Eq/100 grams): 70-90**

*Based on manufacturer's suggested retail price.

** Cation Exchange Capacity - the lower it is, the more the grower can control the plant.

GROW GREENER by choosing a natural, recyclable, and sustainable alternative to soil or peat.

While Grodan Rockwool may not resemble anything you're used to seeing in nature, the product is about as natural as it gets. Rockwool is made by melting and spinning basalt rock, which is a bountiful resource found all over the planet. Used Grodan is repurposed into other products or returned to the factory and re-melted, so that new Rockwool can be made.

Other growth substrates like peat often require natural resources that are far scarcer than rocks. What's more, at Hortifair, the largest international tradeshow for horticulture technology, an independent party deemed that Rockwool has the least impact of any hydroponic growing media on the market. Grodan has also received the prestigious and stringent European Eco-Label, which is an intensive measure of a product's entire lifespan. In addition, the World Health Organization has classified rockwool as a safe-to-use bio-soluble product.

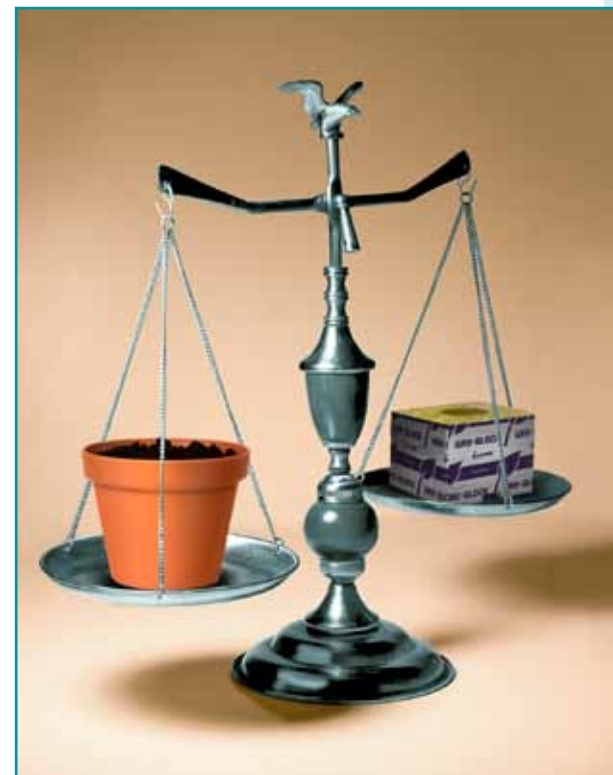
Recycling your used rockwool is easy. You can utilize previously used rockwool to enrich your compost, improve the tilth of your garden soil, or provide a life-long home for house plants.

EU Ecolabel : NL/29/001



Grodan® Rockwool and Soil Mixes

Rockwool Tips the Scale



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Groupie

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Grodan is a systems division of Roxul, Inc. Grodan Rockwool is classified by W.H.O. (World Health Organization) as a bio-soluble product. International cert. ISO 9001 & 4001, and European Ecolabel. Information compiled here is in accordance with the latest knowledge at time of writing; however, Grodan cannot assume liability for the use of its contents.

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EXPECT MORE. DEMAND GRODAN.

GRODAN101.COM

Grow More... Grow Faster... Grow Better... Grow Smarter... Grow Greener...

Are you tired of getting dirty and lugging around endless, back-breaking bags of soil? If a clean, lightweight and highly effective alternative appeals to you, then you're in luck. Growing plants hydroponically using Grodan Rockwool allows you to:

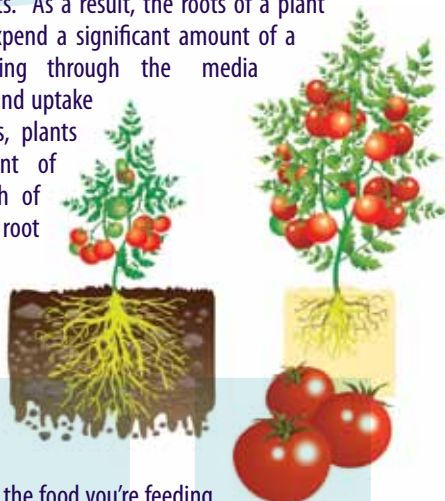
- **GROW MORE** plants and harvest higher yields in smaller spaces
- **GROW FASTER** with less transplant shock
- **GROW BETTER** by improving your nutrient uptake and availability
- **GROW SMARTER** while saving money, space, and inputs
- **GROW GREENER** with a growing media that is natural, recyclable, and sustainable

GROW MORE in less space with Grodan Rockwool.

Think you need an enormous container in order to achieve enormous yields? Think again...

Soil and peat chemically bond to some nutrients, making them less available to the roots. As a result, the roots of a plant grown in soil or peat expend a significant amount of a plant's energy burrowing through the media in an effort to seek out and uptake nutrients. Like humans, plants have a limited amount of energy and when much of that energy is focused on root growth, the plant itself cannot grow as fast or produce as much.

On the other hand, there is no nutrient blockage in Rockwool and your plant's roots have instant access to all the food you're feeding it. That means your plant benefits from superior nutrient uptake and the plant can convert all that excess energy it's not using on root growth to grow new foliage or flowers.



100% Grodan Grow-Cubes
(clay balls on surface only)

25% Grodan Grow-Cubes
75% Leading soil mix

100% Leading soil mix

GROW FASTER when you transplant your Grodan starter plug into a 3"-4" GRO-BLOCK™.

Many plants are propagated in Grodan starters. Some growers take these freshly rooted seedlings or cuttings and transplant them directly into large containers of potting mixes. While this technique works, even the most experienced grower will have a difficult time keeping the moisture around the small plug perfectly even. Complete moisture control maximizes root settings and ensures the plant will have enough settings to support itself when it is mature.

Transplanting into a 3" Grodan GRO-BLOCK before going into the larger container is a smart decision because it provides:

- Better moisture management
- Superior root settings
- More aeration in the root zone
- Higher nutrient availability
- No transplant shock

Strawberry plants in layered media



GROW BETTER by amending your potting mix with Grodan GROW-CUBES™.

Are you accustomed to growing in soil, but interested in trying hydroponics? Don't throw away your container and watering can just yet. First, try mixing Grodan GROW-CUBES in with your potting mix. You can add GROW-CUBES to your preferred growing media by mixing it in before planting or by simply filling up your container half way with your potting mix, adding a two inch layer of GROW-CUBES, and then filling up the remainder with your favorite potting mix. Both methods work.

When adding GROW-CUBES, you are not only aerating your root zone and reducing the compaction of your growing media, but you are also enriching your mix with an inert substrate that does not chemically bond with the nutrients you are feeding at all. Therefore, plants uptake nutrients better, grow faster, and yield more.



Scan this code for detailed, step-by-step transplant tips and instructions.



Scan this code to watch this independent video experiment and see the proof for yourself.