



CO₂e Assessed

Engineered Foam Substrates: Low Carbon Footprint Alternatives to Traditional Peat Products

OASIS® AeroMax™, the first in a line of OASIS® AeroFamily Substrates, is a uniquely engineered foam substrate designed specifically for precision hydroponic farming in controlled growing environments. The open matrix of this ultra-low-density substrate maximizes air porosity, promotes uniform germination and unrestricted root growth, and discourages surface algae.

Oasis Grower Solutions, in conjunction with Carbon Footprint Ltd., completed a Cradle-to-Grave carbon footprint assessment of OASIS® AeroMax™ engineered substrate, comparing CO₂ equivalent emissions with two traditional peat products, based on a Functional Unit (FU) of one 47.18 cm³ plug.

The results are clear: OASIS® AeroMax™ engineered substrate technology is an environmentally sound substrate choice and a low carbon footprint alternative to traditional peat products.

- + Low carbon footprint**
12.5x lower than Loose Filled Peat
43.5x lower than Pressed Peat
- + Maximum air porosity**
Uniform germination
Drier algae-minimizing surface
- + Ultra-low density and strength**
Easy root penetration
Unrestricted root growth
- + Clean, food safe and inert**
Pest and pathogen free
Flexible nutrient dosing



OASIS® AeroMax™ Cradle-to-Grave Carbon Footprint Comparison:

Carbon Emissions per FU of one 47.18cm ³ Plug (gCO ₂ e)			
Product Name	OASIS® AeroMax™	Gravity Filled Loose Plugs	Pressed Peat
Raw materials - embodied	4.72	74.28	264.87
Raw materials transport	0.12	0.86	3.06
Manufacture	0.84	2.67	2.67
Product Distribution	0.21	2.27	8.10
Disposal	0.51	<0.01	<0.01
Total gCO₂e	6.40	80.08	278.70