PRODUCT USAGE

OASIS® PLUGTRAY AeroMax™ / OASIS® PLUGTRAY AeroSelect™

Automation-ready OASIS® AeroMax™ PlugTray and OASIS® AeroSelect™ PlugTray are precision hydroponic substrates engineered to optimize air-to-water ratio in response to the specific requirements of varied crops, climates and growing systems. When crops are started in OASIS® AeroMax™ PlugTray or OASIS® AeroSelect™ PlugTray foam substrates according to these instructions, growers can enjoy superior performance and exceptionally clean production in manual and automated operations.

Instructions for Propagation

1. Unboxing

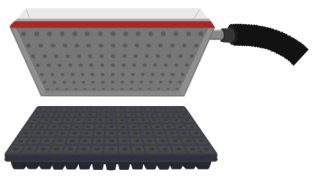
OASIS® AeroMax™ PlugTray and OASIS® AeroSelect™ PlugTray singulated foam propagation substrates arrive preloaded in trays. To unbox your shipment, simply open the box and gently remove the trays one at a time.

2. Preparation and Initial Watering

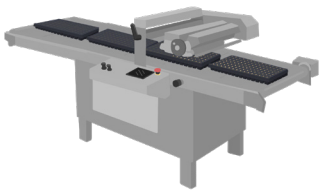
OASIS® AeroMax™ PlugTray or OASIS® AeroSelect™ PlugTray singulated substrates ship clean and inert, with limited nutrients. In addition, these substrates are shipped dry, saving on shipping costs and extending product shelf life.

OASIS® AeroMax™ PlugTray or OASIS® AeroSelect™ PlugTray substrates can be seeded either dry or wet. For automated seeding, it is easier and more practical to seed the substrate dry. Manual seeding can be done wet or dry.

Whether seeding dry or wet, it is critical that growers perform a thorough initial soak using a complete nutrient solution (100 to 125 ppm N) to fully saturate the media and prevent any dry spots. The recommended pH and Electrical Conductivity (EC) are 5.6-5.8 and 1.5mS/cm, respectively.



Vacuum Seeder



Drum Seeder

3. Seeding

For dry seeding, place the seed(s) in the dibble holes prior to an initial soak. Seeds can be placed manually or using automated equipment (needle, vacuum or drum seeder). Pre-dibbled OASIS® AeroMax™ PlugTray and OASIS® AeroSelect™ PlugTray are available in single or multi-seed configurations. For wet seeding, follow the instructions below to saturate the substrate first.

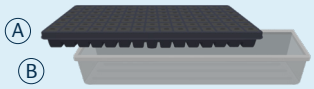
4. Initial Watering/Saturation

The initial soak of OASIS® AeroMax™ PlugTray and OASIS® AeroSelect™ PlugTray should fully saturate the media to prevent any dry spots using a complete nutrient solution (100 to 125 ppm N). The recommended pH and Electrical Conductivity (EC) are 5.6-5.8 and 1.5mS/cm, respectively.

Initial watering/saturation can be achieved by hand watering or by automated watering to efficiently handle large volumes of substrate.

To fully saturate the substrate by hand watering, follow these instructions:

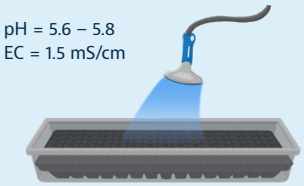
HAND WATERING



Step 1

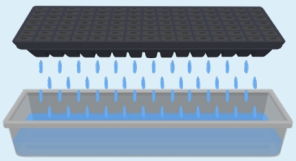
Place the OASIS® AeroMax™ PlugTray or OASIS® AeroSelect™ PlugTray into a solid-bottomed tote large enough and deep enough to accommodate the tray.

A. OASIS® AeroMax™ or AeroSelect™ PlugTray
B. Solid-bottomed tote



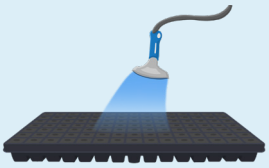
Step 2

Uniformly soak the OASIS® AeroMax™ PlugTray or OASIS® AeroSelect™ PlugTray substrate with nutrient solution using a hose fitted with a water breaker. Use sufficient nutrient solution to completely saturate the media.



Step 3

After 1 to 2 minutes, remove the OASIS® AeroMax™ PlugTray or OASIS® AeroSelect™ PlugTray from the solid-bottomed tote. Let the excess nutrient solutions drain out freely and set the substrate tray on the greenhouse bench.



Step 4

Uniformly irrigate the substrate overhead by using a water breaker for approximately 30 seconds with 3 L (0.8 gallons) of nutrient solution.

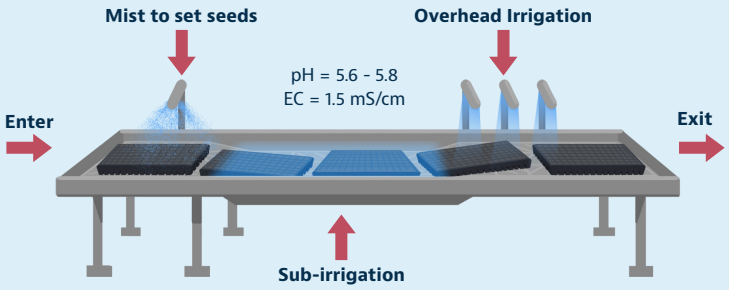
This procedure will allow the substrate to take on the pH and EC of the nutrient solution.

For complete saturation using an automated watering tunnel, follow these instructions:

AUTOMATED WATERING

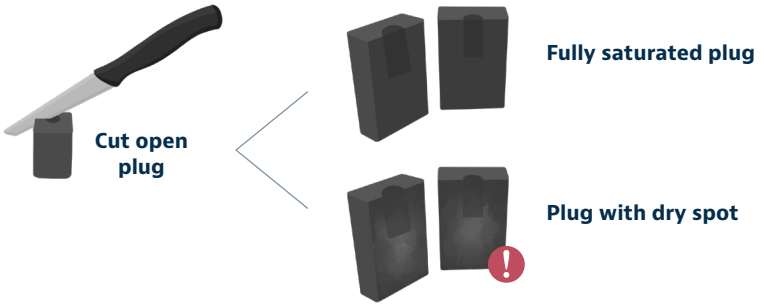
For this process, place the OASIS® AeroMax™ PlugTrays or OASIS® AeroSelect™ PlugTrays directly into the watering tunnel. Complete saturation can be achieved efficiently by running OASIS® AeroMax™ PlugTrays or OASIS® AeroSelect™ PlugTrays through a watering tunnel where the substrate gets saturated via sub-irrigation and overhead watering.

Reach out to your Oasis Grower Solutions Technical Representative to learn more about watering tunnel equipment.



After complete saturation, move the OASIS® RhizoPlug™ Trays onto a bench, where excess water can drain freely.

To confirm complete saturation, cut open a plug to check for dry spots.



Dry and Wet Weights of OASIS® AeroMax™ PlugTrays, OASIS® AeroSelect™ PlugTrays and Individual Plugs

Tray Configuration	Tray Dry Weight (gm) Before Saturation	Tray Wet Weight (gm) After Saturation	Plug Dry Weight (gm) Before Saturation	Plug Wet Weight (gm) After Saturation
72CT OASIS® AeroMax™ Tray	220	2500	0.5	27
105CT OASIS® AeroMax™ Tray	220	2800	0.4	22
128CT OASIS® AeroMax™ Tray	230	3000	0.3	20
72CT OASIS® AeroSelect™ Tray	220	2700	0.5	32
105CT OASIS® AeroSelect™ Tray	220	3000	0.4	26
128CT OASIS® AeroSelect™ Tray	230	3200	0.3	23

Note: Tray and plug dry weights and wet weights are average measurements.

Place in germination chamber or cover to keep dark with temps ~68°F.

5. Top Dressing and Germination

With OASIS® AeroMax™ PlugTray or OASIS® AeroSelect™ PlugTray, vermiculite top dressing is not required with lettuce and certain herbs, including basil, watercress and arugula. However, with crops such as kale, cilantro and spinach, vermiculite top dressing promotes uniform germination and growth.

After seeding, saturation and appropriate top dressing, place the OASIS® AeroMax™ PlugTray or OASIS® AeroSelect™ PlugTray in a germination chamber or cover to keep dark in temperatures around 68°F (20°C).

At 48 hours after initiation of the germination process, remove from chamber. (If trays are left in darkness longer than 48 hours, young plants may begin to stretch.) Provide supplemental lighting or shade as required.

6. Irrigation During Seedling Production

Use a complete nutrient solution (100 to 125 ppm N) with an EC of 1.5mS/cm and pH adjusted to 5.6-5.8 during the initial soaking and subsequent irrigation events. The following is a general irrigation schedule that can be adjusted to fit your specific crop, season and growing conditions.

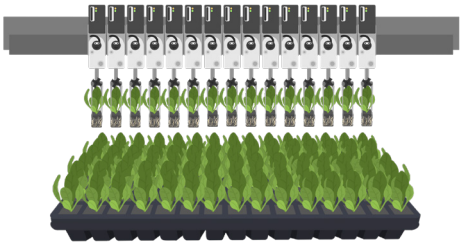
Day	Irrigation Schedule
Day 1	Seeding/Initial Watering. Provide dark treatment.
Day 2	Irrigation not required. Keep under darkness.
Day 3-5	Remove from darkness and irrigate. Overhead irrigation: Apply ~2 L (2 QT) uniformly over the substrate. Sub-irrigation: Irrigate until saturation.
Day 4-5	Irrigate daily. Overhead irrigation: Apply ~2 L (2 QT) uniformly over the substrate. Sub-irrigation: Irrigate until saturation.
Day 6	Irrigate as required until young plants are ready for transplant.

Note: Regular irrigation right after germination (Day 3 onward) washes the coating away sooner, increasing exposure to light and speeding the growth process.

7. Transplant – Automated and Manual

Singulated OASIS® AeroMax™ PlugTray or OASIS® AeroSelect™ PlugTray are compatible with all automated transplanters and can also be used in manual growing operations. For manual transplant, simply place the OASIS® AeroMax™ PlugTray or OASIS® AeroSelect™ PlugTray over a plug popper, gently push down, grasp the plug by hand, and transplant. Please reach out to your Oasis Grower Solutions Technical Representative for more information about customizing plug poppers.

Automated transplant



Manual transplant

Place PlugTray on plug popper

Remove "popped" plugs from PlugTray

Young plants are ready for transplant into NFT (Nutrient Film Technique), DWC (Deep Water Culture) or Aeroponic systems when they have at least two true leaves and roots penetrating from the bottom of the substrate. When transplanted, the bottom surface of the substrate must be in direct contact with the nutrient solution unless other watering procedures are in place to prevent the substrate from drying out.

The following is a general transplant schedule for lettuce propagated in OASIS® AeroMax™ PlugTray or OASIS® AeroSelect™ PlugTray. Timelines may change depending on the growing environment.

Configuration	Time to Transplant
128CT OASIS® AeroMax™ or AeroSelect™ PlugTray	16 days after seeding
105CT OASIS® AeroMax™ or AeroSelect™ PlugTray	18 days after seeding
72CT OASIS® AeroMax™ or AeroSelect™ PlugTray	20 days after seeding

Storage and Handling

Store products in original packaging in a cool, dry location out of direct sunlight. Stored properly, these products have a shelf life of 2 years from the manufacture date.

Food Safety

These food-safe products ship clean and free of pests and pathogens, complementing robust food safety programs.

Disposal

Though not biodegradable, this ultra-low-density substrate will degrade after disposal, reducing volume over time. Please check with your local waste disposal facility for end-of-life options.

Questions

Consult with an Oasis Grower Solutions Technical Representative at support@oasisgrower.com or call us at +1 (855) 585-4769.

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