

OASIS® AeroSubstrates Disposal Tech Sheet

Proper disposal of any kind of used substrate after production is an integral part of growing sustainably and responsibly.

Currently, OASIS® AeroSubstrates engineered foam substrates for precision hydroponics are not compostable or biodegradable. However, as our Cradle-to-Grave Carbon Footprint Assessment revealed, they are an environmentally sound substrate choice, particularly compared to peat-based media.

While the development of a biodegradable engineered foam substrate is a priority with our Research, Innovation & Development team, the proper post-production disposal of our current substrates is also important. The following four disposal options for our clean, food-safe, pathogen-free substrates ensure efficient, appropriate handling:



1. Standard waste disposal

OASIS® AeroSubstrates can be treated as normal waste according to standard waste disposal procedures. With no extra preparation, growers can dispose of used plugs, including attached roots, with non-recyclable waste destined for landfill. These substrates have ultra-low bulk density and are degradable, reducing disposed volume over time. Landfill is the most commonly used disposal method for non-recyclable waste in North America.



2. Pre-disposal compression

Compression of used substrate and roots is a simple, efficient way to minimize transportation and landfill volume. This method is increasingly common, with some growing facilities including compactors on site. Compaction rates vary depending on the compactor and product preparation. However, as an example, a 60hp compactor may deliver a 30-fold reduction in the volume destined for landfill.



3. Incineration

Incinerating post-production substrates eliminates the need for landfill disposal and requires no special substrate preparation. Roots can be incinerated with the substrate. Incineration plants are replacing landfills as the most prominent disposal scenario for non-recyclable waste in Europe and much of Asia, particularly East and Southeast Asia.



4. End-consumer disposal

In some cases, it may be beneficial to leave the roots and substrate on harvested product. One example is "living lettuce" heads sold in clamshells, where wrapping roots around the substrate plug can actually enhance the product's retail appeal. Consumers can dispose of the substrate along with their normal non-recyclable waste, without special handling.

If you have any additional questions regarding appropriate disposal of OASIS® engineered foam substrates, please reach out to us. We also encourage you to check with your local waste disposal facility. Together, we can help ensure post-production substrate disposal is handled properly and responsibly.