

***Tetraselmis* sp. Live Algae Paste**

Thank you for your purchase of *Tetraselmis* Live Algae Paste from Mook Sea Farm! We are confident that you will have great success with this paste, when used appropriately. We have been using the paste in our oyster hatchery for over a year with outstanding growth results. This product is still under development and we welcome any feedback you may have about any aspect of the paste. Please email meredith@mookseafarm.com if you have feedback or questions about the paste.



How to use *Tetraselmis* Live Algae Paste

Storage

Upon receipt of the package, transfer your bag(s) of algae as soon as possible to a standard freezer. We have tested storage of this product in a standard chest freezer at -15 °C. We have performed viability and nutritional testing on cells stored 4 months, but have fed cells stored up to 6 months to broodstock, larval, and seed oysters with no negative effects on growth and development, relative to fresh algae.

Calculate Ration

Unlike other commercial pastes, our *Tetraselmis* Live Algae Paste is so thick that it is most accurately measured by weight instead of volume. The benefit of this is that this measurement is the same for frozen or thawed paste, so *you only need to thaw as much as you need at one time*. Determine your target cells/mL or ug/mL and calculate the weight of paste that you will need for that feeding. Our paste is 1.07 billion cells/g; 22.5% dry weight.

Example 1, based on cells/mL: 5,000 cells/mL in a 3,000 L tank

$$3000 \text{ L} \times \frac{1000 \text{ mL}}{1 \text{ L}} \times \frac{5,000 \text{ cells}}{1 \text{ mL}} \times \frac{1 \text{ g paste}}{1.07 \times 10^9 \text{ cells}} = \mathbf{14.0 \text{ g paste}}$$

Example 2, based on algae dry weight: 2 µg algae/mL in a 3,000 L tank

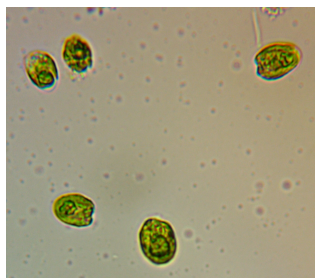
$$3,000 \text{ L} \times \frac{1000 \text{ mL}}{1 \text{ L}} \times \frac{2 \text{ µg}}{1 \text{ mL}} \times \frac{1 \text{ g}}{1 \times 10^6 \text{ µg}} \times \frac{100 \text{ g paste}}{22.5 \text{ g algae}} = \mathbf{26.7 \text{ g paste}}$$

Prepare Ration and Feed

- Open your bag of frozen *Tetraselmis* Live Algae Paste and use a knife to remove the weight of paste that you need for feeding.
- Return the remainder of the paste to the freezer in a ziplock bag.
- Transfer your weighed ration of paste to a pitcher or beaker of seawater (20-30 ppt*) and stir to thaw and resuspend. Transfer to the tank or feeding system that will deliver the food. You are done. ☺
- For easier resuspension, weigh the next day's ration at the end of the day. Store the weighed paste in a covered container in a refrigerator to let it thaw overnight. Transfer the thawed paste to a pitcher or beaker of seawater (20-30 ppt*) when ready to feed. If paste stored in a refrigerator is not used within 24 hours, discard the paste.

Feeding Systems Note

- *Tetraselmis* is a large algae and it is best used in a system with flow or aeration to help it stay suspended in the water column. If you are feeding into a static larval tank, ensure sufficient aeration. If you are feeding into a flow-through or recirculating system using a diluted food tank and peristaltic pump to deliver food, it will be necessary to aerate the food tank.



Feedback

We welcome any feedback you may have regarding the paste, as we are continually working to improve the qualities of the paste. Please email meredith@mookseafarm.com with feedback.

Disclaimer

Tetraselmis spp. is not a suitable alga for every shellfish species or life stage. Due to its large cell size, it should only be fed to larvae when they are retained on a 105 µm screen. Some shellfish species require a diverse diet of multiple algal species for best growth rates. It is the user's responsibility to determine a suitable feeding regime for their shellfish species. A good rule of thumb is to substitute *Tetraselmis* Live Algae Paste for the equivalent amount of fresh *Tetraselmis* that you would have used. This product is suitable for resuspension in seawater with salinities 20-30 ppt*. Mook Sea Farms, Inc. is not responsible for loss of broodstock, larvae, or seed due to improper use of *Tetraselmis* Live Algae Paste.

*We are currently working to improve performance at salinities <20 ppt.