Mixing Success







Like many biological products, sure success with Oceanic and SeaPhos is easy with a few considerations. Here are some tips to keep in mind.

Oceanic and SeaPhos are cold processed and are therefore biologically active. Proper storage and handling are important factors to ensure mixing success on the field.

Mix product well before use.

The fish protein content causes separation of a dark aqueous layer from the emulsified product over time. See **figure 1.** Fish oil also separates into an orange layer. See **figure 2.**

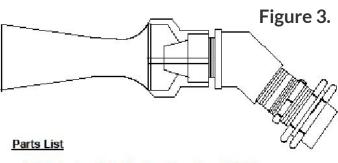
Product quickly returns to a colloidal suspension upon mixing.



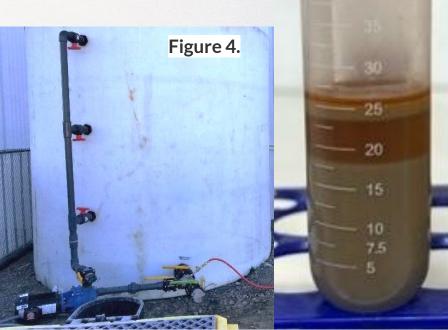
Figure 2, representative

layers.

In tanks, this is best done by circulation pump, by pumping out of the lower valve and back into the top. For long term, bulk tank storage (greater than 30 days) a proper recirculation system is recommended. We recommend installing 3 inductors in tanks less than 6500 gallons and 4 inductors in tanks over 6500 gallons. See **figure 3** for proper inductor system setup and **figure 4** for proper tank plumbing.



- 1.5" Inductor, U.S. Plastics Corp Item #62471
- Female to Female 1.5" 45 Degree Fitting
- 1.5" Nipple
- 42" to 1.5" Bushing
- 2" Banjo Bulkhead Fitting

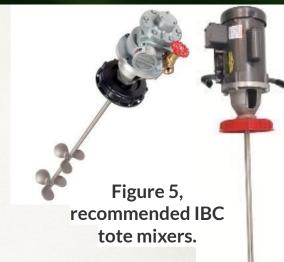






Mix product well before use | Totes

For totes mixing can be done by pumping from the valve back into the top of the tote but is not as effective as a tote mixer. There are various IBC tote mixers built into 6" caps that work well. They are available in both electric and air powered models. See **figure 5.** A wand that injects compressed air into the bottom of totes also works – though it's messy if not done right.



Flush drip lines well after use.

Bioactive products like Oceanic and SeaPhos can form slime in lines and screens, especially after mixing with water. Be sure to **use all product** that has been mixed with water as soon as possible. Flushing lines with water works, though people often use line cleaner products. For organic line cleaner, we have had good results with Yucca Extract.

Thoroughly clean and rinse out tanks or totes before filling.

Clogging of screens is often due to particles picked up in dirty containers or tanks. **Hot water pressure washing** works well. A **curved tip** or **tote washing ball** helps clean the corners.

Jar test all blends to avoid clogging drip lines & spray nozzles.

High phosphorus fertilizers like 10-34-0 and 6-22-6 should not be mixed. Phosphate soap residue and/or High pH irrigation water also cause precipitation of solids. Use a coarse screen downstream of injection.

Ground Application Sprayers: to avoid screen clogging

Circulate product, dilute at least 10:1 in water, change main pump screen to 40 - 50 mesh, remove screens from valves and tips, use 15 - 20 gal/acre tips, reduce pump pressure to 40 - 50 psi.

Storage Considerations

Store product out of direct sun and protect from freezing. If stored for more than 30 days, the product should be agitated – with a pump or mixer, as described. Weekly mixing is best practice. If using a bulk tank, recirculate every 7 days for at least 30 minutes.

