



Setting up a Marine Aquarium



SeAquariums

INTRODUCTION

Marine fish are, in our opinion, the most beautiful creatures on this planet. We are fortunate to be able to appreciate this beauty without fear of debilitating the reefs, thanks to an increasingly responsible sustainable marine trade, supplemented by captive-breeding programs. The latter is a subject close to our own hearts, having successfully reared the first Percula clown fishes in captivity in the UK in the 1970's. However, beauty comes at a price, these stunning creatures are more complex to keep in captivity than freshwater fish and so require investment in additional equipment...but we are confident we can help you achieve this with the **Waterlife** range.



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BUYING YOUR AQUARIUM

Marine fish are more sensitive to changes in water chemistry and so require a larger aquarium. Ideally the smallest size you should consider is 100 litres (approx. 25 galls.), however the more space you can afford to give them, the better.

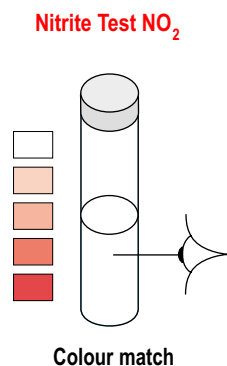
ASSEMBLY & SET-UP

There are many specialised filtration systems available to the marine hobbyist. Discuss the options with your aquatic retailer to choose the best pieces for your set-up. Place the tank on a strong, flat surface like an aquarium stand. N.B. You may need some polystyrene sheeting between tank and stand. Wash any coral sand / gravel thoroughly and place it on the bottom of the tank. Now fill the tank with seawater you have made using reverse osmosis (R.O.) water and **Waterlife's Ultramarine** sea salt. When filled,

connect the filtration and start the water circulating. Connect the combined heater / thermostat(s) and leave the system running for six hours. Connect the lighting for the aquarium and leave this switched on continually until the filter-bed has matured. Now you can add the decorations. **NB.** Don't use rocks with metallic / highly coloured veins, as these may leach toxic chemicals into the aquarium. Using a **Waterlife SeaDrometer**, adjust the specific gravity (S.G.), or salt level, of the seawater to 1.021 - 1.023 at 24 - 25°C (75 - 78°F) (depending on the native region of your intended livestock).

MATURING A FILTER SYSTEM

1. Add **Waterlife BioMature**, carefully following the instructions.
2. Use an **Ammonia and Nitrite Test Kit** daily. Within a few days of starting to add **BioMature**, the test sample will start to register ammonia and nitrite. When this reaches 5 - 10ppm on either kit, stop adding **BioMature**, as enough bacterial nutrients of all types have been provided.
3. Now add a seawater dose of **Waterlife's BacterLife**, which contains a blend of essential nitrifying and sludge digesting bacteria. Using **BacterLife** on daily basis will speed the rate of filter maturation.
4. Continue to test the ammonia and nitrite levels daily, until you get a zero reading. Now the system is almost bacterially mature. To ensure bacterial maturation is complete, carry out another test 24 hours later. If you still cannot detect ANY nitrites your system is ready to receive livestock.
5. From now on, only add **BacterLife** once a week to keep the filter stable. **DO NOT USE BIOMATURE once your system houses livestock.**



NB. It is important to use a Waterlife Nitrite Test Kit as it accurately records nitrite levels up to 20 ppm.

WAYS TO SPEED UP THE MATURATION PROCESS

1. High oxygen levels (i.e. fierce **SeaMist** - wooden airstone diffusion).
2. High turnover rate through the filter bed
3. Temperature of 24 / 25°C (76° / 78° F)
4. pH range of 8.1 - 8.3
5. Minimal organic matter in seawater, by using properly cured rock/shells and high grade, clean coral-sand.
6. An adequate depth of filtration media.

Test the water with a seawater pH test kit, before adding livestock to your system. This is essential, as the process of maturing the filter may have lowered the pH, as far as 7.7 - 7.9. You can rectify this by using **Waterlife's 8.3 Buffer**. If you are going to keep invertebrates, test for nitrates and adjust the nitrate level to zero again by partial water changes using R.O. water and **Ultramarine** sea salt.



External canister filter

Add **Carbon** (carbon sachet) to your filter. This is an efficient method of removing large molecule organics.

NB. De-gas carbon first with boiling water.

STOCKING THE MARINE AQUARIUM

Fish only system:

Create a wish-list using a good reference book and take it to your local marine shop and ask him to rule out any inappropriate species and re-arrange your list from the shy, delicate species, through to the more aggressive species. This is the order in which to purchase your fish, 1 or 2 every 2 - 3 weeks. **NB.** Don't exceed the stocking ratio of 2.5 cm (1 inch) of fish per 18 litres (4 gallons) of seawater in the first 12 months for fish / invertebrate aquaria. After this initial period, **never** exceed 2.5 cm (1 inch) of fish to 9 litres (2 gallons) of water in a fish only system.

Introducing new fish

1. Turn off the tank's lighting.
2. Take at least 30 mins. to acclimatise the new fish(es) to the tank water, floating the bag on the surface changing small amounts of bag-water for tank-water over this time.
3. Re-arrange the rocks after introducing the newcomer(s) or better still add new rocks to create new territory.
4. Carry out a light feed to distract attention from the newcomer(s).
5. Add a single dose of **Waterlife's Cuprazin** as disease preventative. **NB.** If the system will later contain invertebrates as well as fishes, use **Octozin not Cuprazin**. Use **Carbon** to remove 4 days after treatment.
6. Add a double dose of **BacterLife** to cope with the increased biological load.



Fish/Invertebrate community system

1. Introduce living rock and don't make any further additions for 2 weeks.
2. As with fish, don't overload your system, it should take several months to stock the tank.
3. Allow at least 20 mins. to acclimatise the invertebrates (as above).
4. Introduce the fish using exactly the same method as above, but remembering to :
 - a) Tell your dealer that you already have an invertebrate collection so he can eliminate certain fish
 - b) Use **Octozin not Cuprazin** for treatment.



