

A saltwater aquarium can provide a fascinating and highly colourful display, generally salt water creatures are more sensitive to changes in the water chemistry than fresh water fish, a high pH is maintained, corals in particular need the alkalinity in order to thrive. Many reefs have bleached due to an increase in acidity. This high pH means that any ammonia spike will be far more toxic than with a low pH, especially with a newly set up system where insufficient bacteria has built up to perform the nitrifying process but even in a well established aquarium certain factors can soon rapidly cause a severe and potentially fatal situation, keeping a healthy marine tank has become so much easier with a device such as a seneye that can warn of impending problems, apart from the well being of live stock by which we have a responsibility to provide as much care as we can, the potential financial cost can be very significant, just one alert of either heaters going wrong, tank leakage, ammonia spikes, irregularity with pH can save and pay for the device many times over, performing tests several hours later has little benefit when almost certainly damage will have been done.

When we measure the pH, we are measuring hydroxyl ion in solution, as pH increases so do the hydroxyl ions which attach themselves to the hydrogen ions leaving ammonia in its toxic state, NH_3 , as pH decreases then so do the hydroxyl ions, leaving hydrogen ions to attach to the ammonia molecules detoxifying and ionising, making safe as NH_4 . Therefore because of maintaining this high pH it is important to be aware of potential ammonia spikes.

Most people will maintain the salt content (specific gravity) at about 1.021-22, salt water fish have to equalise the salt content within their bodies and their surrounding environment a lower salt content helps osmoregulation and better a lower level than a high level although some oceans have a very high salt content, such as the red sea!

Many invertebrates, anemones, corals, sponges, jelly fish etc contain zooxanthellae a brown yellowish algae with in their tissues and correct lighting is essential for maintaining these very simple forms of animal life. The seneye reef provides and guides the various light spectrums. As in freshwater planting sea grass, caulerpa etc will help to reduce the nitrates and help control algal growth. (see article on corals)

Take proper advice, research as to which fish you will be mixing, for example butterfly fish will feed on polyps, usually if more of an invertebrate tank wiser to go for smaller species of coral fishes, of course clown fish living in their anemone has been a subject of fascination for many years.

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