

# Product

## NATURE'S OCEAN NATURAL NUTRI- SEAWATER AND LIVE SAND

Feedback is of great importance to retailers. They will acquire a product that they think is of decent quality and, let's face it, that they think will sell. However, their own experiences with a particular item only tells them so much. The information supplied by their customers is invaluable and retailers that listen to their clientele and put their information to good use are generally better places to visit than those that don't. One might forgive many retailers presented with the option to buy "live seawater" for not being tempted. After all, they generally

have plenty of well mixed artificial seawater lurking somewhere behind the scenes that is cheaper to produce. However, listen to those people using it – even sporadically – and they might revise their opinion.

Now before we go on we should confess here that when initially presented with what at first glance appears to be imported natural saltwater we thought – why? However, when offered the opportunity to try it for ourselves it was obvious that, in the interest of fairness, and for our own education, we should give it a try. We were not actually unaware of this product. In fact a couple of hobbyists had reported positive results after using it for water changes and were continuing to do so reflecting their happiness with the product.

In order to put **Nature's Ocean Live Natural Seawater** through its paces we were required to establish a new aquarium. To make the set-up as straight forward as possible we chose the **Red Sea Max** aquarium as the testing arena. We had sufficient Nutri-Seawater product to do this and to assess the impact of doing water changes with this product on an existing system at a later date.

Nature's Ocean, as a company, were already familiar to us prior to our involvement in this review as they are one of the suppliers of the hugely popular live sand substrates that have become widespread in the hobby over the past few years. The basic premise of the use of their Nutri-Seawater is to provide the natural marine bacteria, trace elements and critical nutrients absent from artificial mixes. It also claims to offer instant cycling when used in conjunction with the company's own live aragonite substrate. Aragonite substrates such as this, supplied with a wealth of naturally occurring marine bacteria, are able to cycle new systems in their own right. Available in a choice of grades and "colours" with captivating names such as Natural White, Australian Gold, Samoa Pink and Black Beech the advantage of these substrates is that the bacteria are present in a biofilm that covers each sand grain present from the word go rather than having to colonise them over a period of time. This means that the conversion of ammonia and nitrite can occur straight away, as it does with Nutri-Seawater.



Characteristic:	Measurement
pH	8.3
Specific Gravity	1.027
Appearance	Clear
Malodour	None
Live Bacteria per Gallon (US) of Saltwater	> 11,000,000

# reviews...



Nature's Ocean Live Sand is available in five different grades/colours

Now it is certain that many aquarists that find making artificial salt mixes a chore might embrace this product regardless of the cost. However, we wanted to put some of its claims to the test. Armed with the knowledge that if anything looked even slightly amiss we could relocate any livestock quickly and safely we thought it best to take Nature's Ocean up on their claims of instant cycling (would we experience a diatom bloom?) in this system. We would then try some 10% water changes (as recommended by Nature's Ocean) on an existing aquarium to assess their impact.

You may have noticed that the specific gravity in this off-the-shelf seawater is around 1.027. Although we know that the vast majority of animals will be fine with this S.G. we prefer a lower density and thus we diluted the seawater to 1.023. Our only minor gripe here was that the carbonate hardness of the mix dropped from around 8 dKH to 5 dKH when diluted as per instructions with reverse osmosis water. Perhaps the literature should recommend buffered RO water instead? Anyway, this was easily rectified and we were soon looking at our sample water circulating away in its new home. Once up to temperature

we added cured live rock (same day), together with Nature's Ocean Live Sand and left the aquarium overnight. After a quick series of tests to determine whether any trace levels of ammonia or nitrite were present and to verify that the pH and KH were holding steady we decided to bite the bullet and introduce some animals to this "cycled" aquarium.

Now we were keen to test the claims of the Nutri-Seawater's accompanying literature but anxious not to stress unduly any of the livestock we planned to stock. Thus we chose robust species, well settled into selling aquaria and that had been in stock for at least a fortnight. First in went some button polyps, mushroom anemones and soft corals. Next we introduced some fish – a pair of black and white tank raised anemonefish to be precise. Some hermit crabs and snails completed our initial flirtation with the stocking of this system – all on the same day and all within 24 hours of the water hitting the glass for the first time. The result? Well, it was a resounding success. Livestock thrived, and thrives still to this day, no ammonia, no nitrite and nitrate levels remain very low. In this respect the Nutri Seawater does exactly what it says on the tin.

Now, although the health of the livestock is paramount in any review such as this we were confident from the word go that if well-cured live rock and well-mixed saltwater was used that we might have anticipated similar results without the aid of Nutri-Seawater. However, the knowledge that this product has millions of nitrogen-cycling bacteria in residence makes for an even safer "rapid-stocking". What was interesting was that we did not experience any algal cycling in this new aquarium. We might usually expect a bloom of brown diatoms on the glass and rockwork during a standard, non-Nutri-Seawater driven cycling period, giving way to other species as the aquarium ages. We did notice some minor deposits on the sand but have found this to be the case in many existing systems to which the Live Sand has been added.

The fact must still remain that regardless of how keen a new aquarist is to fill and stock their system they are unlikely to have the confidence, or indeed budget, to do this overnight. Thus it was vitally important that we checked the role that Nutri-Seawater has to play with an existing aquarium when used as the source of water for a water change.

One of the features of Nutri-Seawater, as outlined in the promotional literature, is the fact that it contains many of the bacteria that are reduced or eliminated through the addition of UV sterilisers or ozonizers to the marine aquarium. The bacteria it contains are said to be Autotrophic, Heterotrophic and Chemolithotrophic. Put into more simple terms the bacterial cocktail contained in Nutri-Seawater and Nature's Ocean Live Sand includes variants that we expect to be present in mature biological filters, denitrifiers and those bacteria that will digest organic debris.



Corals in the Red Sea Max, such as this *Discosoma* sp. known as the blue spotted mushroom, settled quickly in the Nutri-Seawater.

It is possible that any long-established aquarium with or without add-ons such as ozone or UV will lack the diversity of bacterial fauna that can be found in newly established systems. Thus Nutri-Seawater could have a role in reinvigorating the conditions within the aquarium. We added it to two aquaria established for around 20 months each and home to an assortment of stony and soft corals with colonial polyps. But first we wanted to really assess the impact of a change undertaken with standard artificial mix saltwater – at least to the naked eye – so we changed a similar amount of water and observed the results. We then waited for a fortnight and changed the same percentage with Nutri-Seawater. Although we do not claim any kind of scientific significance for the results they are very interesting and reflect the feedback of Nutri-Seawater users we had already spoken to.

When the results of water changes undertaken with artificial mixes were observed we noted an initial depression of polyp expansion for the first 24 hours or so followed by a slight improvement in the overall appearance of the aquarium's inhabitants. With the Nutri-Seawater the impact was far more immediate. Within a few hours we began to notice an overall improvement in polyp expansion but something else, something less tangible. The aquarium conditions seemed to improve – a certain "Je ne sais quoi" that gave the observer the impression of the system being reinvigorated. Of course, we are aware that readers might want something more quantifiable to determine the practical use of this product. However, unless you are a microbiologist with a large budget and plenty of spare time you are likely to be only able to speculate as to what is happening in the aquarium. Suffice to say we were impressed.

So Nutri-Seawater is a very interesting product. Our initial thoughts of it simply being ready-mixed saltwater have been dispelled. Alright, so this might find a way off the shelf into the hands of aquarists that simply can't be bothered to make up an artificial mix or need saltwater in a hurry. What they will actually be getting appears to us at least to be so much more than that.

Nature's Ocean Live Live Natural Nutri-Seawater is available nationwide. For more information concerning stockists you can contact their Sole UK distributor Ultrastone International ([sales@ultrastone-intl.com](mailto:sales@ultrastone-intl.com)). For more information about this and other Nature's Ocean Products visit [www.naturesocean.com](http://www.naturesocean.com).



This Red Sea Max was set up using Nutri-Seawater