# *The Tropic Marin® Starter Guide to a Vibrant Marine Aquarium*

***Here's what you need for the quick, easy and successful setup and maintenance of your salt water aquarium!***

**Care plans for both, beginners and busy aquarists**

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**Products for advanced aquarists**

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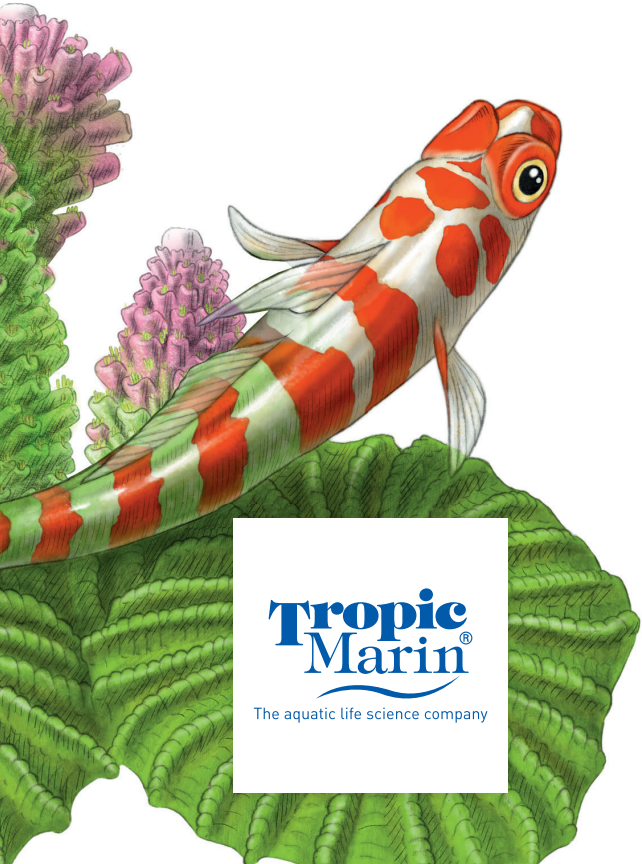


Tropic Marin®

The aquatic life science company

# *From simple beginnings ...*

***On these pages we present a variety of basic care plans. These are ideal for both beginners and those who prefer to have a simplified approach. Choose which basic care plan is best for you.***

*Turn to the back pages for helpful hints about entering the world of saltwater aquariums from our expert Hans-Werner Balling.*

# *Now for the serious stuff ...*

***Would you like to micro-manage your aquarium? No problem.***

***These pages list the products that will allow the advanced aquarist to individualize their aquarium down to the tiniest detail.***

# *Best nutrition for your animals*

# Basic Care 01

## For fish only – marine aquarium

high carbonate hardness, strong buffer

## *Sea salt*

**Pharmaceutically pure sea salt:**
with all major, minor and trace elements of natural seawater

Tropic Marin®
Classic Sea Salt

## *Bacteria*

**Carbon Dosing Powder:**
promotes growth of natural beneficial bacterial flora

Tropic Marin®
Reef Actif

**Nitrifying and probiotic bacteria:**
strengthens the immune systems of fish and shrimp

Tropic Marin®
Nitribiotic

## *Analysis*

**Test Set:**
measuring all the important data
pH, KH, $PO_4$, $NO_2/NO_3$, $NH_4^+/NH_3$

Tropic Marin®
Compact Lab

**Standard aquarium values:**

Specific gravity: 1.022-1.026 • Salinity: 29-35 PSU
Carbonate hardness: 7-11°dH • Nitrate: <10mg/l
Phosphate: <0.2 mg/l • Magnesium: 1200-1300 mg/l
Calcium: 350-400 mg/l

# Basic Care 02

## For reef aquarium
## Separate additives – more control



## *Sea salt*

**A)**

**For reefs with higher alkalinity: 8 to 10 dH**

Tropic Marin®
Classic Sea Salt

**or**

**B)**

**For reefs with lower alkalinity: 6 to 8 dH**

Tropic Marin®
Pro-Reef Sea Salt

## *Bacteria*

**Carbon Dosing Powder:**
promotes growth of natural beneficial bacterial flora

Tropic Marin®
Reef Actif

**Nitrifying and probiotic bacteria:**
strengthens the immune systems of fish and shrimp

Tropic Marin®
Nitribiotic

## *Minerals*

**Supplies all the minerals corals need:**
Ca, Alk, Mg, trace elements

Tropic Marin®
All-For-Reef

## *Analysis*

**Test Set:**
measuring all the important data
pH, KH, $PO_4$, $NO_2/NO_3$, $NH_4^+/NH_3$

Tropic Marin®
Compact Lab

**Standard aquarium values:**

Specific gravity: 1.024-1.026 • Salinity: 32-35 PSU

Carbonate hardness: 8-10°dH or 6-8°dH • Nitrate: <5 mg/l
Phosphate: <0.1 mg/l • Magnesium: 1280-1380 mg/l
Calcium: 400-440 mg/l

# Basic Care 03

## For reef aquarium
## Easy application – carefree carbon dosing



### *Sea salt*

**Pharmaceutically pure sea salt:**
with all major, minor and trace elements of natural seawater
+ more calcium & magnesium
+ carbon dosing for beneficial bacteria

Tropic Marin®
Bio-Actif
Sea Salt

### *Bacteria*

**Nitrifying and probiotic bacteria:**
strengthens the immune systems of fish and shrimp

Tropic Marin®
Nitribiotic

### *Minerals*

**Supplies all the minerals corals need:**
Ca, Alk, Mg, trace elements

Tropic Marin®
All-For-Reef

### *Analysis*

**Test Set:**
measuring all the important data
pH, KH, $PO_4$, $NO_2/NO_3$, $NH_4^+/NH_3$

Tropic Marin®
Compact Lab

**Standard aquarium values:**

Specific gravity: 1.024-1.026 • Salinity: 32-35 PSU
Carbonate hardness: 6-8°dH • Nitrate: <5 mg/l
Phosphate: <0.1 mg/l • Magnesium: 1280-1380 mg/l
Calcium: 400-440 mg/l

# Basic Care 04

## For reef aquarium
## Easiest application – most additives included

### *Sea salt*

**Pharmaceutically pure sea salt:**
with all major, minor and trace elements of natural seawater
+ more calcium & magnesium
+ carbon dosing for beneficial bacteria
+ nitrifying and probiotic bacteria

Tropic Marin®
Syn-Biotic
Sea Salt

### *Minerals*

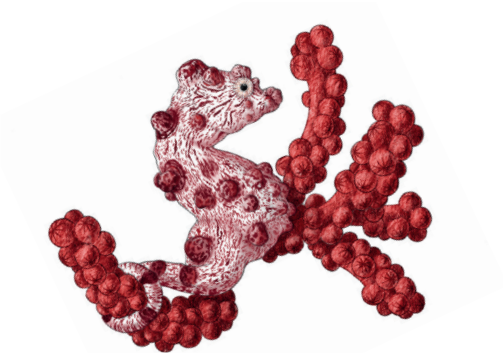
**Supplies all the minerals corals need:**
Ca, Alk, Mg, trace elements

Tropic Marin®
All-For-Reef

### *Analysis*

**Test Set:**
measuring all the important data
pH, KH, $PO_4$, $NO_2/NO_3$, $NH_4^+/NH_3$

Tropic Marin®
Compact Lab



**Standard aquarium values:**

Specific gravity: 1.024-1.026 • Salinity: 32-35 PSU
Carbonate hardness: 6-8°dH • Nitrate: <5 mg/l
Phosphate: <0.1 mg/l • Magnesium: 1280-1380 mg/l
Calcium: 400-440 mg/l

# Minerals and Trace Elements

## *To promote growth of stony corals*

**Calcium and carbonate hardness (KH) in one highly concentrated product**

Tropic Marin®
Carbo-Calcium
Powder
*powder, very economical*

Tropic Marin®
Carbo-Calcium
*liquid, easy dosage*

**Calcium and carbonate hardness:**
the original 3-part Balling method

Tropic Marin®
Original Balling
Components
A, B und C
*powder, very economical*

Tropic Marin®
Original Balling
Liquid Set
A, B und C
*liquid, easy dosage*

**Raising the carbonate hardness:**
the ocean's natural buffer system

Tropic Marin®
Triple Buffer
(KH+pH+
trace elements)
*powder, very economical*

Tropic Marin®
Liquid Buffer
(KH+pH+
trace elements)
*liquid, easy dosage*

**Raising the strontium level:**
needed for growth of stony corals

Tropic Marin®
Bio-Strontium
*powder, very economical*

# Minerals and Trace Elements

## *To promote the growth of purple coralline algae & corals*

**Maintains the magnesium level:**
important also for keeping the Ca level

Tropic Marin®
Bio-Magnesium
*powder, very economical*

Tropic Marin®
Bio-Magnesium Liquid
*liquid, easy dosage*

## *For hardy fish and strong shells*

**Trace element iodine:**
easy to use
Lugol's solution
(not available in USA)

Tropic Marin®
Iodine
*liquid, with pipette for dosing*

## *For brilliantly coloured corals*

**Potassium:**
easy to use solution

Tropic Marin®
Potassium
*liquid, easy dosage*

## *For strong, bright invertebrates*

**Trace elements:**
all trace elements found in natural seawater

Tropic Marin®
Pro-Coral Mineral
*powder, very economical*

**Trace elements:**
replenishes the most used trace elements

Tropic Marin®
$A^-$ Elements und
$K^+$ Elements
*liquid, easy dosage*

# Nutrient Control

## *For fish only and reef aquariums*

**Phosphate reduction:**
high capacity,
long-lasting Granular
Ferric Oxide (GFO)

Tropic Marin®
Elimi-Phos
Longlife
*solid granules*

**Phosphate reduction:**
fast acting concentrated
solution to lower
phosphate levels

Tropic Marin®
Elimi-Phos Rapid
*liquid, easy dosage*

**Carbon Dosing Liquid:**
promotes growth of
natural beneficial bacterial
flora, accelerated nitrate/
phosphate reduction

Tropic Marin®
Elimi-NP
*liquid, easy dosage*

## *For reef aquariums*

**Carbon Dosing Liquid
with increased nitrogen/
phosphates:**
for nutritionally deficient
systems

Tropic Marin®
Plus-NP
*liquid, easy dosage*

**Carbon Dosing Liquid
with additional nitrogen/
phosphates:**
for maintenance of nitrogen/
phosphate ratio

Tropic Marin®
NP-Bacto-
Balance
*liquid, easy dosage*

# Nutrient Controls

## *For a clear view*

**Removes the causes of cloudy water and eliminates yellowness:**
high-performance activated carbon

Tropic Marin®
Carbon
*solid granules*

## *Filter materials for reactors*

**Carbon dosing pellets to reduce phosphates and nitrates:**
for fluidized bed reactors

Tropic Marin®
NP-Bacto-Pellets
*biodegradable Pellets*

**Carbon dosing trickle media to reduce phosphates and nitrates:**
for aerated trickle filters

Tropic Marin®
NP-Bacto-Tricks
*biodegradable trickle elements*

**Universal trickle filter for nutrient reduction:**
for use with the NP-Bacto tricks

Tropic Marin®
Bio-Actif-Reactor
5000

# Analysis

## *Test kits for fish only and reef aquariums*

**To measure the pH value**

Tropic Marin®
pH-Test

**Range:** pH 7.4-9.4
**Increment:** 0.2-0.3

**To measure the carbonate hardness**
alkalinity

Tropic Marin®
KH-Test

**Range:** 1-20 °dH
**Increment:** 0.5/1 °dH

**To measure the concentration of phosphates**
$PO_4$

Tropic Marin®
$PO_4$-Test

**Range:** 0.03-3.0 mg/l
**Increment:** 0.05 mg/l

**To measure the concentration of nitrites and nitrates**
$NO_2/NO_3$

Tropic Marin®
$NO_2/NO_3$-Test

**Range $NO_2$:** 0-2.0 mg/l
**Increment $NO_2$:** 0.02 mg/l

**Range $NO_3$:** 0.5-50 mg/l
**Increment $NO_3$:** 0.5 mg/l

**To measure the concentration of ammonium and ammonia**
$NH_4^+/NH_3$

Tropic Marin®
$NH_4^+/NH_3$-Test

**Range:** 0.02-3.0 mg/l
**Increment:** 0.03 mg/l

# Analysis and Accessories

## *Higher resolution test kits for advanced aquarist*

**To measure the carbonate hardness**
alkalinity

Tropic Marin®
KH-Test
Professional

**Range:** 0.1-20 °dH
**Increment:** 0.1 °dH

**To measure phosphate concentration**
$PO_4$

Tropic Marin®
$PO_4$-Test Professional

**Range:** 0.01-1.0 mg/l
**Increment:** 0.02 mg/l

**To measure nitrite and nitrate concentrations**
$NO_2/NO_3$

Tropic Marin®
$NO_2/NO_3$-Test Professional

**Range $NO_2$:** 0-1.0 mg/l
**Increment $NO_2$:** 0.002 mg/l

**Range $NO_3$:** 0-20 mg/l
**Increment $NO_3$:** 0.05 mg/l

**To measure calcium and magnesium concentrations**
Ca/Mg

Tropic Marin®
Ca/Mg-Test Professional

**Range Ca:** 300-498 mg/l
**Increment Ca:** 4 mg/l

**Range Mg:** 820-1800 mg/l
**Increment Mg:** 20 mg/l

**To measure potassium concentration**
$K^+$

Tropic Marin®
$K^+$-Test Professional

**Range:** 300-500 mg/l
**Increment:** 5 mg/l

## *Devices to determine salinity*

**Measurement of specific gravity:**
an exact measurement of the salinity

Tropic Marin® hydrometer

**Range:** 1.021-1.031 kg/l
**Increment:** 0.0001

Tropic Marin®
Measuring Cylinder

# Food

## *Food for filter feeders*

**Food for stony corals**

Tropic Marin®
Zooton
*powder, fine grains*

Tropic Marin®
Zootonic
*liquid, easy dosage*

**Food for soft corals and clams**

Tropic Marin®
Phyton
*powder, superfine grains*

Tropic Marin®
Phytonic
*liquid, easy dosage*

## *Food for saltwater fish*

**Universal fish food**

Tropic Marin®
O-Megavital
*granulate, various grain sizes*

Tropic Marin®
O-Megavital Micro
*granulate, fine grains*

**Food for fish that feed on algae**

Tropic Marin®
O-Megavital Nori
*flakes, medium sized*

**Universal food supplement for fish**

Tropic Marin®
Lipo-Garlic
*oil, easy dosage*

# *Do you have any questions?*

***We will be pleased to help you with any questions you may have regarding saltwater aquariums.***

***Send an email to help@tropic-marin.com or visit our website: www.tropic-marin.com***

*You may also scan this QR code for further information.*

# *Helpful hints from Tropic Marin expert H.-W. Balling*

***Every aquarium is an individual biotope or ecosystem, and therefore needs customized care. During the start-up phase, in particular, parameters such as carbonate hardness, pH value and the concentrations of calcium, phosphate and nitrate will vary more than in a mature tank. Experienced aquarists know what these variations mean and can help you to respond properly. If none happens to be available, try this email address: help@tropic-marin.com***

## *Rejuvenating a reef aquarium*

*Changing the water regularly will reduce the levels of undesirable substances such as nitrate and phosphate and restore the balance of important trace elements. The result: a cleaner aquarium with livelier fish and more colorful, robust corals.*

## *How many fish?*

*Apart from a suitable habitat, each fish needs enough swimming space if it is to thrive. If you have a small aquarium, please stick to a small number of small fish.*

**TIP 01**

## *Easy care "Starter Fishes"*

*The True and False Percula Clownfish should be kept with a companion Anemone. Although it is not the natural partner anemone for these two types of fish, the Bubble Tip Anemone is a good substitute in an aquarium.*

*A pair of Pyjama Cardinal Fish are pretty and a good choice for beginners.*

*Free cleaning service: the algae-eating Jewelled or "Lawn-Mower" Blenny - either singly or with other cleaners such as Hermit Crabs.*

*Doctorfish (Tangs) are very suitable for mid-sized tanks of 500 l/100 gallons or more, e.g. Yellow Doctorfish and Indian Gold Ring Bristletooth. If you choose the latter, then please don't keep Jewelled Blennies as well, as the two species compete for the same food.*

*Beware of Damsel Fish and other pomacentrids! Although they are extremely robust and easy to keep, they are often aggressive towards other fish - especially later additions to the aquarium.*

*Angelfish are also relatively robust and a pair of one of the smaller species is suitable in small and mid-sized aquariums. However, they tend to nibble on corals.*

**TIP 02**

## *Corals for beginners and experienced aquarists*

*Soft Mushroom Corals or Disc Anemones of the genera Discosoma or Rhodactis are good beginner corals: hardy, colorful and quick growing.*

*Leather corals of the Sarcophyton, Lobophytum and Sinularia genera e.g. Toadstool, Finger or Cabbage Leather corals are classic beginner corals: fleshy in texture, they are easy to care for and grow fast.*

*Symbiotic or zooxanthellate Gorgonians, also known as Sea Fans, grow well into spreading shapes; choose genera such as Isis, Pterogorgia, Pseudopterogorgia, Plexaurella, Plexaura, Pinnigorgia and Briareum.*

*Large polyp stony corals (LPS) of the genera Acanthastrea, Blastomussa, Caulastrea (trumpet coral), Duncanopsammia (whisker coral), Favia (brain coral), Lobophyllia, Pavona and Symphyllia are attractive and fairly hardy.*

*For the more experienced aquarist, small polyp stony corals (SPS) of the genera Montipora, Stylophora pistillata (club finger) and Pocillopora verrucosa are hardy, adaptable and grow in a wide variety of shapes.*

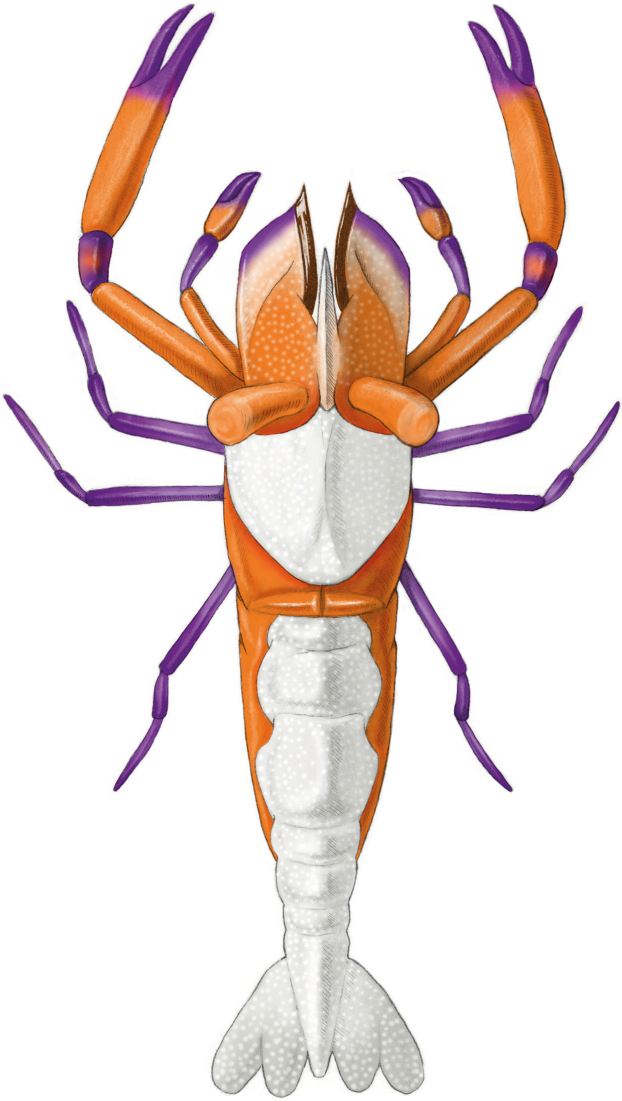
*Enjoy setting up and caring for your aquarium.*

*Yours,*
*Hans-Werner Balling*

**TIP 03**

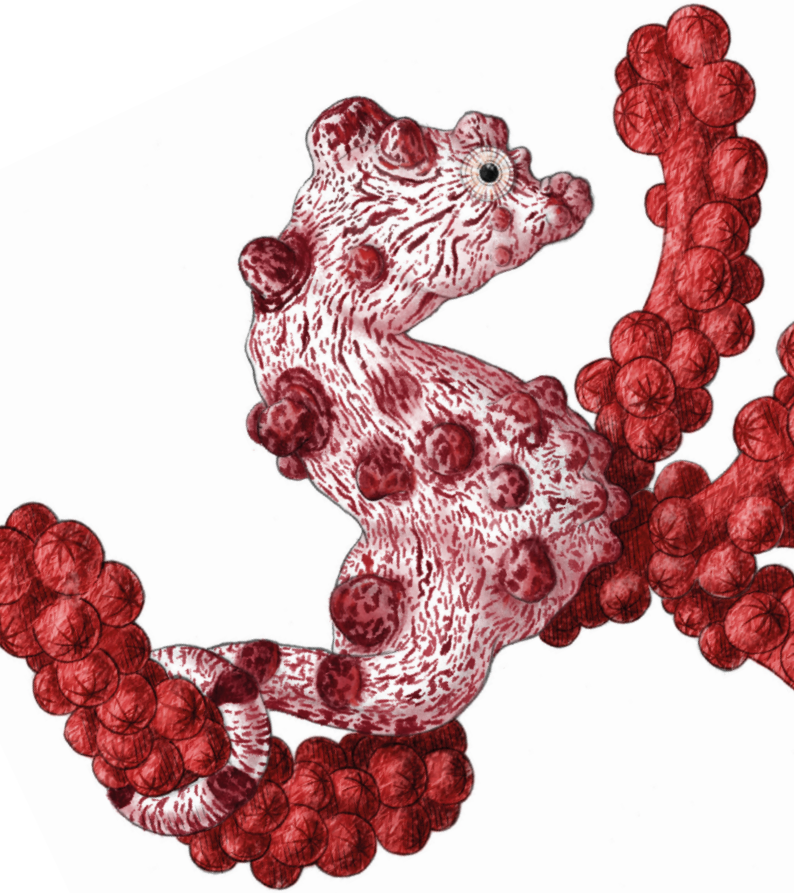
## *Emperor Shrimp*
*(Periclimenes imperator)*

*Probiotic bacteria activates the immune system. These microorganisms are beneficial for both fish and shrimp.*



***Bargibant's or pygmy seahorse***
*(Hippocampus bargibanti)*
***on a gorgonian sea fan*** *(Muricella plectana)*

*The reinforcing synbiotic effect of prebiotic substances and probiotic bacteria are extremely beneficial to corals, fish and shrimp.*

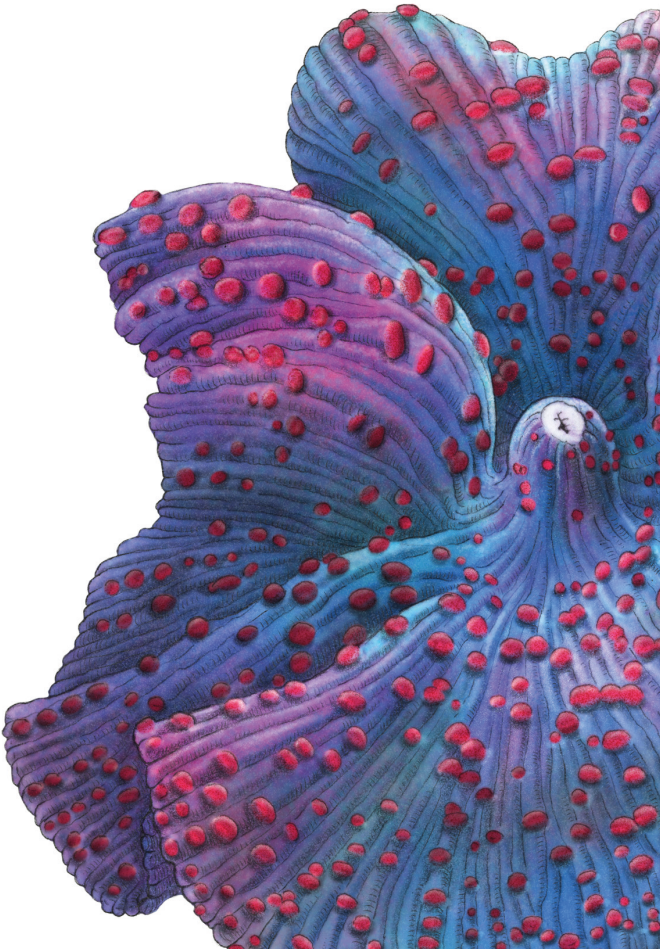


# *Optimum water parameters for reef aquariums*

| | |
|---|---|
| ***Temperature*** | *23 - 27 °C (73 - 80 °F)* |
| ***Specific gravity at 25 °C (77 °F)*** | *1.024 – 1.026 g/cm³* |
| ***Conductivity*** | *50.5 to 53 µS/cm* |
| ***pH value*** | *8.0 – 8.4* |
| ***Alkalinity/carbonate hardness*** | *6 – 8 °dH* |
| ***Magnesium*** | *1280 – 1380 mg/l* |
| ***Calcium*** | *400 – 440 mg/l* |
| ***Ammonium*** | *< 0.02 mg/l* |
| ***Nitrite*** | *< 0.02 mg/l* |
| ***Nitrate*** | *< 2 mg/l* |
| ***Phosphate*** | *0.02 - 0.1 mg/l* |
| ***Ratio nitrate : phosphate*** | *about 10:1* |

## ***Disc Anemone***
*(Discosoma sp.)*

*Disc or Mushroom Anemones do not require a great deal of light to grow well and reward "old hands" and beginners alike with glowing colors. They open up particularly well in magnesium-rich water.*



## *Orange Sun Coral / Orange Cup Coral*
*(Tubastrea faulkneri)*

*This azooxanthellate stony coral derives its popular English name from its brilliant yellow or reddish-orange colour. It must be fed regularly and needs good quality water that is low in phosphates.*

## *Spiny Seahorse*
*(Hippocampus histrix)*

*Seahorses, such as the spiny seahorse, are slow moving and should only be kept in aquariums where they have no competition for food. Due to their sensitivity, it is essential to check their water parameters regularly.*

## *Emperor Angelfish*
*(Pomacanthus imperator)*

*Angelfish, such as the Emperor Angelfish, are a typical choice for fish only aquariums and large reef aquariums. Tropic Marin Classic Sea Salt is a popular choice here because it offers greater buffering capacity.*

## *Wire Coral*
*(Cirrihipathes spiralis)*

*Colorful azooxanthellate gorgonians must be given suitable food such as Zootonic.*

## ***Candycane pygmy goby*** *(Trimma cana)* ***on honeycomb coral*** *(Diploastrea heliopora)*

*Prebiotic organic substances promote the growth of a valuable bacterial flora. Bio-Actif Sea Salt delivers these nutrients which benefit both corals and fish.*