



Wiegandt

Wiegandt GmbH

High-quality aquarium products

Product Catalog



Research, development and production
Serving Aquarists since 1959



hw® Wiegandt GmbH

**hw® Wiegandt,
from 1959...**



till today...



Wiegandt

Since the company foundation in the early year 1959, WIEGANDT was and is a family owned company, related to the world wide research and further development of fish and reef keeping.

The company WIEGANDT has started as importer of the first tropical marine fishes and invertebrates available on the Germany market. The biggest problem in this times was the absolute lacking of usable marine salt mixes to be able to create the needed marine water. To improve the habitat conditions of the animals the company WIEGANDT took the challenge to develop their own 1-component marine salt mix. What has started as a solution for the own requirements, in very short time became a strongly demanded product by public aquariums, research centers, laboratories and enthusiastic marine aquarium hobbyists. The first "hw® Meersalz" was born.

In the following years the company WIEGANDT specialize more and more in the development and manufacturing of high quality marine salt formulations. Many marine salt formulations was specially developed for different Zoos, public aquariums and the changing needs of the raising marine aquaristic. With the increasing demand the production capacities has been raised and also the manufacturing processes has become more and more sophisticated. Therefore our production plants at our location in Krefeld was steadily improved and became one of the most advanced manufacturing facilities for marine salt formulations. Related to this process the own researches in the field of the marine environment and the tropical marine habitats of the different live forms leads to the design and development of the hw® product line.

Meanwhile the company WIEGANDT can make a retrospective view on several decades of experience, research and successful development of marine salt formulations for all kind of aquaristic applications. With this accumulated know how WIEGANDT is able to implement also newest marine research results into our formulations and manufacturing processes.

The internal company validation and testing procedures are one of the guaranties for a reliable quality and a reproducible manufacturing process.



hw®-Marinemix professional

hw®-Marinemix professional

The most used hw-Marinemix® for professional aquaristics as well as research and development applications

- With natural calcium and magnesium concentration resulting in a seawater composition virtually identical to natural seawater
- Free of chemical and environmental pollutants
- Unique biocatalyst system based on the analyses of natural seawater
- Optimal carbonate hardness (alkalinity) and a natural, stable pH buffer system
- Free of Nitrates, Phosphates and other unwanted chemical elements

hw-Marinemix® professional has been the proven standard in aquaristics applications and science for decades. hw-Marinemix® professional is used wherever a high and constant quality as well as a guarantee for natural water parameters are required.

hw-Marinemix® professional provides ambitious hobby aquarists with a high development standard that previously was only available to research facilities.

hw-Marinemix® professional is based on current and well-researched scientific findings in the field of marine biology and ecology. This is the only way seawater identical with nature can be produced, which then serves as the ideal biotope for even the most sensitive marine live forms.

hw-Marinemix® professional is, like the name indicates, the marine salt formulation for professional applications and the sophisticated marine aquarist. hw-Marinemix® professional provides a ideal and unique flexible basis for all kind of marine aquaristic projects as it dissolves to a absolute nature like marine water. Offering a stable natural buffer system which tolerates also peaks in the upcoming of organic acids like it can occurs in breeding tanks.

hw-Marinemix® professional offers the possibility, starting from nature like marine water parameters, to realize nearly any needed water parameter levels. All water parameters can be easily increased to the desired levels and providing on this way the ideal starting base for all kind of marine environments or scientific research applications.

Item no.	Packing	Content
021005.00	Plastic bucket with carrying handel	5 kg for approx. 150 l
021010.00	Box with reclosable polythene bag	10 kg for approx. 300 l
021012.00	Plastic bucket with carrying handel	12,5 kg for approx. 375 l
021020.00	Box with reclosable polythene bag	20 kg for approx. 600 l
021022.00	Plastic bucket with carrying handel	20 kg for approx. 600 l
021040.00	Box with reclosable polythene bag	40 kg for approx. 1.200 l

hw®-Marinemix professional





hw®-Marinemix reefer

hw®-Marinemix reefer

hw-Marinemix® reefer for reef aquaristics and breeding of soft and stone corals

- Enriched with calcium and magnesium for vigorous coral growth
- Optimized for the special requirements of modern reef aquaristics
- Unique biocatalyst system based on the analyses of natural seawater
- With natural amino acids and organically stabilized types of iodine
- Optimal carbonate hardness (alkalinity) and a natural, stable pH buffer system
- Free of Nitrates, Phosphates and other unwanted chemical elements

hw-Marinemix® reefer contains all trace-elements present in unpolluted natural tropical marine water, which stays completely and easily soluble thanks to the mixed-crystals in the composition. Micro precipitations of trace-elements like in other marine salts often the case, could therefore not occur with hw-Marinemix reefer.

hw-Marinemix® reefer is an adapted further development of the successfully hw-Marinemix® professional proven for decades and primarily takes the changed requirements of modern reef aquaristic into account.

hw-Marinemix® reefer process a higher Calcium and Magnesium concentration which is a essential precondition for the successful growing of organic reef structures.

hw-Marinemix® reefer makes it possible to cover the always existing increased demand of essential needed elements to ensure a healthy growing and development of marine reef organism, just by realizing the periodically water changes.

hw-Marinemix® reefer also considers the interactions in the water chemistry which occur due to an increased need for minerals, trace elements, amino acids, and biocatalysts, and compensates all resulting interactions in a natural and to a natural extent.

hw-Marinemix® reefer has been proven beneficial especially when targeting the care and growth of skeletogenic corals and mollusks and significantly contributes to the healthy development and colonization of larvae.

Even with most delicate corals the reproduction through fragmentation is enhanced and damages of organic coral tissue will be obviously reduced.

hw-Marinemix® reefer is only produced with raw materials proved by us and meeting our high standards of quality. All used components are also used in the pharmaceutical production (as long as available, highest on the production of pharmaceutical products focused quality level).

hw-Marinemix® reefer is continuously monitored and tested by us providing on this way a high quality and a constant composition. Additionally monitoring and board band analysis through an independent and DIN EN 45 001 accredited testing laboratory is your guaranty for highest hw®-Quality.

hw®-Marinemix reefer



Item no.	Packing	Content
023005.00	Plastic bucket with carrying handel	5 kg for approx. 150 l
023010.00	Box with reclosable polythene bag	10 kg for approx. 300 l
023012.00	Plastic bucket with carrying handel	12,5 kg for approx. 375 l
023020.00	Box with reclosable polythene bag	20 kg for approx. 600 l
023022.00	Plastic bucket with carrying handel	20 kg for approx. 600 l
023040.00	Box with reclosable polythene bag	40 kg for approx. 1.200 l



hw®-MineralMarin

hw®-MineralMarin

NaCl-free marine salt to use as for compensating the disordered ion balance when practicing systems like the so called “Baling-Method”.

hw® MineralMarin

is a NaCl-free marine salt formulation for special applications. It contains, except the not added NaCl compound, all component parts and ingredients of a high quality marine salt formulation. All trace-elements and also the hw® bio-elements are included in hw® MineralMarin.

hw® MineralMarin is an excellent appliance to fix displacements in the ion balance of the aquarium water or just avoid then in the beginnings when practicing the “Baling-Method”.

The described displacements in the ion balance always must occurs when the supply of Calcium, Magnesium and Carbonates takes place over the addition of Calcium chloride, Magnesium chloride and Sodium bicarbonate.



Item no.	Packing	Content
023101.00	Plastic container	1.000 g
023105.00	Plastic container	5.000 g
023110.00	Plastic bucket with carrying handel	10.000 g

hw® BufferMarin

increases specifically the carbonate hardness / alkalinity and stabilized the pH-value in the optimal level.

hw® BufferMarin – for stabilizing and optimizing of the pH-value with simultaneous refilling of the natural buffer capacities (carbonate hardness / alkalinity) of the marine water.

- for optimal pH-value buffering
- optimizes the pH-value
- improved the buffer capacities of the marine water
- increases the carbonate hardness/alkalinity
- made of pure raw materials
- absolutely free of nitrates, phosphates and silicates

hw® BufferMarin

A stable pH-value is one of the most important and central preconditions to ensure the well-being and healthy growth of all maritime life forms in a marine aquarium.

hw® BufferMarin offers you a easy and simple applicable aiding tool to adjust and keep the pH-value in the recommended range of 8.0 to 8.5. In the same way **hw® BufferMarin** stabilized and refills the buffer capacities of the aquarium water and prevent on this way possible hazards which could be caused by strong fluctuations in the pH-value



Item no.	Packing	Content
030105.00	Plastic container	500 g with measuring scoop
030110.00	Plastic container	1.000 g with measuring scoop
030115.00	Plastic bucket with carrying handel	5.000 g with measuring scoop



hw®-CalciumMarin

hw®-CalciumMarin

Calcium-Additive with CO₂⁺ for enhanced coral growth in Reef Aquariums.

- Supplies aquarium water with natural calcium and CO₂
- Ideal calcium source for all hermatypic (reef-building)
- Does not affect pH-value
- Optimal carbonate hardness (alkalinity) and a natural, stable pH buffer system
- Ion balance of water remains unchanged

hw-CalciumMarin® significantly increases the growth and well-being of all hermatypic organisms in seawater aquariums.

Reef-building organisms require a constant and sufficient supply of calcium for healthy growth. Calcium is absorbed with the help of the algae living in symbiosis with the corals, the so-called zooxanthellae, which in turn (in addition to a good light source) also require carbon dioxide (CO₂) for their growth (= process of photosynthesis).

hw-CalciumMarin® therefore contains calcium as well as CO₂ in a biologically pure and optimized form.

The carbon dioxide is required for the photosynthesis of the zooxanthellae, which then make available the calcium corals need to grow their coral skeleton.

hw-CalciumMarin® moreover also stabilizes the pH-value of the water by renewing the natural buffer capacity in the optimal range and maintains a biological and natural ion balance as well.

hw-CalciumMarin® is extremely pure and prevents undesired substances and byproducts from reaching the aquarium water.

Used trace trace elements or other care products are not affected by this additive.



Item no.	Packing	Content
030005.00	Plastic container	500 g with measuring scoop
030010.00	Plastic container	1.000 g with measuring scoop
030015.00	Plastic container	5.000 g with measuring scoop

hw®-MagnesiumMarin

Biologically balanced and highly concentrated magnesium source for reef aquariums

- Supplies seawater with a highly pure form of magnesium
- Biologically optimally utilizable by all hermatypic (reef-building) organisms
- Does not affect the ion balance of the water
- Boosts the natural growth of corals and red coralline algae
- Enhanced the growth of robust coral skeletons

hw-MagnesiumMarin® supports the natural structure of coral skeletons and boosts coral growth and development. Deficiency symptoms due to a lack of magnesium are avoided. Magnesium is one of the key components of seawater and - similar to calcium (hw-CalciumMarin®) - is needed by almost all hermatypic (reef-building) organisms. During photosynthesis, magnesium is produced, converted with biological processes, and required grow a sturdy skeleton structure. The photosynthesis transformation process continuously lowers the magnesium content in reef-aquariums until noticeable and severe deficiency symptoms occur. This is why magnesium has to be supplied to seawater aquariums. Simple magnesium compounds only provide short-term relief and quickly result in a complete ion balance shift in the seawater.

hw-MagnesiumMarin® naturally enriches with biologically highly utilizable magnesium without disturbing the ion balance or to add undesired additives or byproducts to the water. Only the magnesium content is raised, which creates ideal conditions for a successful reef aquarium.

Magnesium content in marine water:

The reef zones of the world's oceans have a magnesium content of approx. 1250 to 1310 mg/l. Higher values up to 1450 mg/l have been proven quite beneficial in modern reef aquariums.



Item no.	Packing	Content
031005.00	Plastic container	500 g with measuring scoop
031010.00	Plastic container	1.000 g with measuring scoop
031015.00	Plastic container	5.000 g with measuring scoop

hw®-Supplementing Salts

hw®-Supplementing Salts

The hw®-Supplementing Salts makes it possible to specifically counteracts the taking place mineral consumption in closed environment of the marine aquarium. The elements which has to be most frequently supplemented are the alkaline earth ions like Calcium, Magnesium and there carbonate conjunctions as part of the carbonate alkalinity .

To be able to supplement especially this elements, without coming into the risk to cause unwanted displacements of the marine water ion balance, a special system has been created.

With this system remaining and redundant chloride and sodium ions, in the correct mass relation, results to NaCl or common salt. Taking in consideration that NaCl is one of the major elements of marine water it has to be found a way to compensate this steadily increase of the NaCl part. To be able to realize this the application of a NaCl "free" marine salt mix is one of the best methods. The salinity will therefore slowly but steadily rise up but this can be easily compensated with the next water change by adding some more fresh water.

With the hw®-Supplementing Salts a basis is offered to realize the supplementing of this elements in accordance to the needs of your aquarium.



hw®-Natriumhydrogen-Carbonat

hw®-Natriumhydrogen-Carbonat (NaHCO₃)

Calcium and Carbonate addition according to the combined Calcium chloride and Sodium bicarbonate dosing

Applying this method, calcium concentration and carbonate hardness would be increased by adding hw-Calciumchlorid(CaCl₂) and hw-Natriumhydrogencarbonat (NaHCO₃) to the aquarium water. As side effect Cl (chloride) and Na (sodium) will remain and this both elements will result to NaCl which is simple salt.

So far the NaCl is one of the main compounds of marine water but a steadily raising concentration of NaCl would lead to a increasing adulteration of the marine water composition and can cause on long term major problems.

To avoid this changes in the water composition the missing elements should be added by using a certain quantity of a "NaCl-free" marine salt formulation like hw®-MineralMarin. The end balance of all added elements will than result again in a complete marine water formulation with nearly no surplus of elements.

By applying this method over longer time the salinity / density of the aquarium water will raise slowly (or even faster) so that you should have always a eye on this values. If the salinity / density will raise too much you will have to counteract this with a smaller water change of fresh water.

hw®-Natriumhydrogen-Carbonat (NaHCO₃)

Sodium bicarbonate fine powder form, for the adaptation of water parameters (Carbonathardnes).

Pure Natriumhydrogen-Carbonat (NaHCO₃) in fine powder form for the increasing of the Carbonatehardness/Alkalinity concentration in accordance to the Calciumchlorid and Magenesiumchlorid/ Sodiumhydrogencarbonat method.



Item no.	Packing	Content
030231.00	Plastic container	1.000 g
030232.00	Plastic container	5.000 g
030233.00	Plastic bucket with carrying handel	10.000 g



hw®-Magnesiumsulfat-Heptahydrat

hw®-Magnesiumsulfat-Heptahydrat ($\text{MgSO}_4 \times 7\text{H}_2\text{O}$)

Addition in according to the combined Magnesium sulfate and Magnesium chloride dosing

The main concept:

Beside sodium chloride, magnesium is the second biggest component of the natural marine salt. But compared to sodium chloride, the magnesium level in the aquarium water will slowly decline due to the adsorption of several marine organisms (like corals, mollusks and other reef building organisms) and bio-chemical processes.

Therefore to avoid deficits in Magnesium the concentration of this element should be adjusted from time to time.

In natural marine water the Magnesium concentration is around 1250 – 1380 mg/l and depends strongly from seasonal changes and geographic location.

To elevate specifically the Magnesium concentration in the aquarium water you will need hw®-Magnesiumchlorid-Hexahydrate and also a specified amount of hw®-Magnesiumsulfat-Heptahydrat, to not alter negatively the natural balance of the chloride- and sulfate ions in your aquarium water.

hw®-Magnesiumsulfat-Heptahydrat ($\text{MgCl}_2 \times 6\text{H}_2\text{O}$) Magnesium sulfate in fine crystalline form, for the adaptation of water parameters

Pure Magnesiumsulfat-Heptahydrat ($\text{MgSO}_4 \times 7\text{H}_2\text{O}$) in fine crystalline form for the increasing of the Magnesium concentration in combination with hw®-Magnesiumchlorid-Hexahydrat.



Item no.	Packing	Content
030221.00	Plastic container	1.000 g
030222.00	Plastic container	5.000 g
030223.00	Plastic bucket with carrying handel	10.000 g

hw®-Magnesiumsulfat-Heptahydrat

hw®-Magnesiumsulfat-Heptahydrat ($\text{MgSO}_4 \times 7\text{H}_2\text{O}$)

Addition in according to the combined Magnesium sulfate and Magnesium chloride dosing

Best practice:

The exact calculation of the needed quantities in gram has to be made by calculating with the molar mass and under consideration of the bounded crystal water together with the fixed relation of chloride to sulfate in natural marine water.

By using the combination of hw®-Magnesiumchlorid-Hexahydrate and hw®-Magnesiumsulfat-Heptahydrat the weight relations are as following:

0,95 g hw®-Magnesiumsulfat-Heptahydrat ($\text{MgSO}_4 \times 7\text{H}_2\text{O}$)

7,58 g hw®-Magnesiumchlorid-Hexahydrate ($\text{MgCl}_2 \times 6\text{H}_2\text{O}$)

1,00 g Magnesium (Mg)

Sample calculation:

A marine aquarium with 500 l water volume has a Magnesium concentration of 1200 mg/l, the concentration should be elevated to 1300 mg/l.

To calculate the needed quantity of Mg in gram proceed as following:

$$1300 - 1200 = 100 \text{ mg/l} \times 500 \text{ l (aquarium volume)} = 50 \text{ g Mg in total}$$

$$50 \text{ g} \times 0,95 \text{ g} = 47,50 \text{ g hw®-Magnesiumsulfat-Heptahydrat (MgSO}_4 \times 7\text{H}_2\text{O)}$$

$$50 \text{ g} \times 7,58 \text{ g} = 379,00 \text{ g hw®-Magnesiumchlorid-Hexahydrate (MgCl}_2 \times 6\text{H}_2\text{O)}$$

Both quantities should be solved together in around 600 ml RO-water (or demineralized water) and filled up to finally 1000ml.

From this solution should be added 100 ml daily over the next 10 days to the aquarium water. On the 5. day please realize a control measuring of the actual magnesium level/concentration in the aquarium water, so that eventually adaptation could be made.



hw®-Calciumchlorid-Dihydrat

hw®-Calciumchlorid-Dihydrat ($\text{CaCl}_2 \times 2\text{H}_2\text{O}$)

Addition in accordance to the Calciumchlorid and sodium bicarbonate dosing

By Applying this method Calcium and Carbonates where supplemented to the aquarium water, by adding hw®-Calciumchlorid (CaCl_2) and hw®-Natriumhydrogencarbonat (NaHCO_3). As excess components Cl (chloride) and Na (sodium) will remain and the end result is NaCl = salt. NaCl is one of the main components of natural marine water but a steadily increase of NaCl will lead to a negative change in the water composition.

To avoid such changes it is useful to compensate the increasing NaCl component by applying a NaCl „free“ marine salt (hw®-MineralMarin).

By this way the end result will be again normal marine water, without changing the ion balance of the marine water.

Only side effect of this method is, that the density / salinity of the aquarium water will slowly increase. You can control this side effect by measuring the Density / specific gravity from time to time with a hw®-Densitometer with Thermometer.

If you notice an increasing of the measured value you can compensate this by just only adding a higher part of fresh water when making the next water change.

hw®-Calciumchlorid-Dihydrat ($\text{CaCl}_2 \times 2\text{H}_2\text{O}$)

Calciumchlorid in fine crystalline form, for the adaptation of water parameters

Pure Calciumchlorid-dehydrate ($\text{CaCl}_2 \times 2\text{H}_2\text{O}$) in fine crystalline form for the increasing of the Calcium concentration in accordance to the Calciumchlorid / Sodiumhydrogencarbonat method



Item no.	Packing	Content
030211.00	Plastic container	1.000 g
030212.00	Plastic container	5.000 g
030213.00	Plastic bucket with carrying handel	10.000 g

hw®-Calcium and Carbonate dosing

hw®-Calciumchlorid-Dihydrat ($\text{CaCl}_2 \times 2\text{H}_2\text{O}$)

Addition in accordance to the Calciumchlorid and sodium bicarbonate dosing

Way of proceeding:

The best would be to prepare 3 solutions of 2 liters each. To prepare the solutions please only use RO-water o demineralized water as to avoid precipitations cause by minerals present in normal tap water.

- Canister I with 213,50g hw-Calciumchlorid-Dihydrat per 2 l RO o demineralized water
- Canister II with 163,80g hw-Natriumhydrogencarbonat per 2 l RO o demineralized water
- Canister III with 48,75g hw-MineralMarin per 2 l RO o demineralized water

Application of the prepared solutions:

Take in consideration that the elevation of the Calcium concentration of 50 mg/l will simultaneously provoke a raise of the carbonate hardness of about 7° dKH!

When starting with the dosing, the solution should applied with 5 ml / ccm per 10 liters of aquarium water. A daily control measuring of the calcium and carbonate hardness should be made to get a feeling for the effect of the dosing.

In any case both values should only be raised slowly!

If the proposed values are reached, the dosing should be reduced or elevated by 10% till the values stabilized at the desired point. If one time the optimal dosing for the aquarium has been found a weekly control measurement of the value should be enough.

But please be aware that due to seasonal influences (temperature, light incidence, etc.) and also through changes in the aquarium (coral growth, new animals, reducing of the live stock, etc.) fluctuations can happened which will make it necessary to adapt or recalibrate the dosing to compensate them.



hw®-Magnesiumchlorid-Hexahydrat

hw®-Magnesiumchlorid-Hexahydrat ($\text{MgCl}_2 \times 6\text{H}_2\text{O}$)

Addition in accordance to the Magnesium sulfate and Magnesium chloride dosing method

The main concept:

Beside sodium chloride, magnesium is the second biggest component of the natural marine salt. But compared to sodium chloride, the magnesium level in the aquarium water will slowly decline due to the adsorption of several marine organisms (like corals, mollusks and other reef building organisms) and bio-chemical processes.

Therefore to avoid deficits in Magnesium the concentration of this element should be adjusted from time to time.

In natural marine water the Magnesium concentration is around 1250 – 1380 mg/l and depends strongly from seasonal changes and geographic location.

To elevate specifically the Magnesium concentration in the aquarium water you will need hw®-Magnesiumchlorid-Hexahydrate and also a specified amount of hw®-Magnesiumsulfat-Heptahydrat, to not alter negatively the natural balance of the chloride- and sulfate ions in your aquarium water.

hw®-Magnesium-chlorid-Hexahydrat

($\text{MgCl}_2 \times 6\text{H}_2\text{O}$)

Magnesiumchlorid in fine crystalline form, for the adaptation of water parameters

Pure Magnesium-chloride-hexahydrate($\text{MgCl}_2 \times 6\text{H}_2\text{O}$) in fine crystalline form for the increasing of the magnesiumconcentration in accordance to the Magnesium chloride / Sodiumhydrogencarbonat method.



Item no.	Packing	Content
030241.00	Plastic container	1.000 g
030242.00	Plastic container	5.000 g
030243.00	Plastic bucket with carrying handel	10.000 g

hw®-Magnesiumchlorid-Hexahydrat

hw®-Magnesiumchlorid-Hexahydrat ($\text{MgCl}_2 \times 6\text{H}_2\text{O}$)

Addition in accordance to the Magnesium sulfate and Magnesium chloride dosing method

Best practice:

The exact calculation of the needed quantities in gram has to be made by calculating with the molar mass and under consideration of the bounded crystal water together with the fixed relation of chloride to sulfate in natural marine water.

By using the combination of hw®-Magnesiumchlorid-Hexahydrate and hw®-Magnesiumsulfat-Heptahydrat the weight relations are as following:

0,95 g hw®-Magnesiumsulfat-Heptahydrat ($\text{MgSO}_4 \times 7\text{H}_2\text{O}$)

7,58 g hw®-Magnesiumchlorid-Hexahydrate ($\text{MgCl}_2 \times 6\text{H}_2\text{O}$)

1,00 g Magnesium (Mg)

Sample calculation:

A marine aquarium with 500 l water volume has a Magnesium concentration of 1200 mg/l, the concentration should be elevated to 1300 mg/l.

To calculate the needed quantity of Mg in gram proceed as following:

$$1300 - 1200 = 100 \text{ mg/l} \times 500 \text{ l (aquarium volume)} = 50 \text{ g Mg in total}$$

$$50 \text{ g} \times 0,95 \text{ g} = 47,50 \text{ g hw®-Magnesiumsulfat-Heptahydrat (MgSO}_4 \times 7\text{H}_2\text{O)}$$

$$50 \text{ g} \times 7,58 \text{ g} = 379,00 \text{ g hw®-Magnesiumchlorid-Hexahydrate (MgCl}_2 \times 6\text{H}_2\text{O)}$$

Both quantities should be solved together in around 600 ml RO-water (or demineralized water) and filled up to finally 1000ml.

From this solution should be added 100 ml daily over the next 10 days to the aquarium water. On the 5. day please realize a control measuring of the actual magnesium level/concentration in the aquarium water, so that eventually adaptation could be made.



hw-biotip® Amino Acids and Biocatalysts



hw-biotip® was developed specifically for the needs and requirements of corals and living cells in seawater aquariums.

hw-biotip® consists of an optimized and balanced composition of amino acids and biocatalysts, which provides coral tissue and its pigmentation with the basic building blocks needed for healthy growth.

hw-biotip® enhanced all metabolic processes, ensures even growth, and helps develop natural pigmentations.

Item no.	Packing	content
011001.00	Bottle with measuring cup	250 ml
011002.00	Bottle with measuring cup	500 ml
011003.00	Bottle with measuring cup	1.000 ml
011004.00	Canister	5 l

hw-multivit® Multivitamin Complex for Sea- and Freshwater



hw-multivit® contains a balanced quantity of all the essential vitamins for ornamental fish and invertebrates. It strengthens their natural resistance to disease, and boosts their well-being, colorfulness, and willingness to spawn.

hw-multivit® is equally well suited for use in freshwater and seawater aquariums.

hw-multivit® is especially tried and trusted for the subsequent breeding of delicate young fish and larvae.

Item no.	Packing	content
012001.00	Bottle with measuring cup	250 ml
012002.00	Bottle with measuring cup	500 ml
012003.00	Bottle with measuring cup	1.000 ml
012004.00	Canister	5 l

Micro Nutrient Solution for Seawater **hw-nanotip®**

hw-nanotip® is a special nutritional solution with micro nutrients for corals and filtering organisms in sweater aquariums.

hw-nanotip® is absorbed by coral polyps and filtering invertebrates, e.g. mussels and sponges, just like natural ocean plankton and supplied to the organism.

hw-nanotip® minimizes the possibility of deficiency symptoms and clearly promotes growth, coloration, and natural behavior.



Item no.	Packing	content
011081.00	Bottle with measuring cup	250 ml
011082.00	Bottle with measuring cup	500 ml
011083.00	Bottle with measuring cup	1.000 ml
011084.00	Canister	5 l

Broad-band care for Seawater **hw-hydrokoll®**

hw-hydrokoll® protects fish and corals from possible infections in case of damage to the mucous membrane or tissue. It removes the irritating effects on such wounds and reduces stress. The new additions and changes in care require less adjustment time and are significantly easier.

hw-hydrokoll® binds damaging heavy metal concentrations, phenols, bacterial toxins, as well as urticant toxins (stinging toxins) so that they can be removed with the protein skimmer.



Item no.	Packing	content
011021.00	Bottle with measuring cup	250 ml
011022.00	Bottle with measuring cup	500 ml
011023.00	Bottle with measuring cup	1.000 ml
011024.00	Canister	5 l



hw-tracetip-1® Trace Elements for Reef Aquariums



hw-tracetip-1® is a trace element solution for the targeted use in reef aquariums.

hw-tracetip-1® contains a high amount of trace elements and is free of complexing or chelating agents.

hw-tracetip-1® enables clearly stronger colorations and enhances growth.

hw-tracetip-1® can be used alone or (recommended) in combination with **hw-tracetip-2®**. The combined use significantly accelerates the absorption of the trace elements.

Item no.	Packing	content
011031.00	Bottle with measuring cup	250 ml
011032.00	Bottle with measuring cup	500 ml
011033.00	Bottle with measuring cup	1.000 ml
011034.00	Canister	5 l

hw-tracetip-2® Trace Elements for Reef Aquariums



hw-tracetip-2® is a trace element solution for the targeted use in reef aquariums.

hw-tracetip-2® contains a high amount of trace elements and is free of complexing or chelating agents.

hw-tracetip-2® enables clearly stronger colorations and enhances growth.

hw-tracetip-2® can be used alone or (recommended) in combination with **hw-tracetip-1®**. The combined use significantly accelerates the absorption of the trace elements.

Item no.	Packing	content
011041.00	Bottle with measuring cup	250 ml
011042.00	Bottle with measuring cup	500 ml
011043.00	Bottle with measuring cup	1.000 ml
011044.00	Canister	5 l

Trace Elements for Seawater Aquariums

hw-miratip®

hw-miratip® provides aquarium water with all the trace elements with a positive effect in a natural concentration.

hw-miratip® prevents fading of natural colorations and provides resistance against inhibitors negatively affecting overall development.

hw-miratip® is especially well suited for aquariums with a mixture of various seawater creatures. The water will appear clearer and colorations have more of a contrast and are more distinct just a few hours after adding the recommended dose.



Item no.	Packing	content
011011.00	Bottle with measuring cup	250 ml
011012.00	Bottle with measuring cup	500 ml
011013.00	Bottle with measuring cup	1.000 ml
011014.00	Canister	5 l

IODINE Additive for Seawater

hw-iodtip®

hw-iodtip® enhanced growth, deeper pigmentation, as well as the resistibility of all coral types and lower animals in seawater aquariums.

hw-iodtip® encourages the growth of a robust and healthy exoskeleton of echinoderms (e.g. sea urchins) and facilitates the ecdysis process and the growth of crustaceans.

hw-iodtip® makes it easier for corals (e.g. newly added) to become used to changed light and care conditions and significantly reduces the risk of tissue infections.

hw-iodtip® contains only those types of iodine also found in natural seawater.



Item no.	Packing	content
011071.00	Bottle with measuring cup	250 ml
011072.00	Bottle with measuring cup	500 ml
011073.00	Bottle with measuring cup	1.000 ml
011074.00	Canister	5 l



hw-strontip® Strontium for Seawater Aquariums



hw-strontip® is a highly concentrated complex based on strontium specifically developed for seawater aquariums.

hw-strontip® enhanced the growth, natural pigmentation of stony and soft corals, as well as that of red coral algae and mollusks.

hw-strontip® enables clearly stronger colorations and better growth. The combination of additional elements hw-strontip® significantly boosts the absorption of the strontium made available into the tissue structure.

Item no.	Packing	content
011061.00	Bottle with measuring cup	250 ml
011062.00	Bottle with measuring cup	500 ml
011063.00	Bottle with measuring cup	1.000 ml
011064.00	Canister	5 l

hw-odinex® Counteracts Oodinium in Seawater



hw-odinex® reliably and quickly acts against oodinium in seawater aquariums.

As soon as even the smallest amount of oodinium is detected, use hw-odinex at once to prevent further spreading of this destructive dinospore.

Please note:

hw-odinex® contains copper ions, among others. Invertebrates such as anemones, snails, all coral types, mussels, and crustaceans must be removed from the aquarium before use!

Item no.	Packing	content
011051.00	Bottle with measuring cup	250 ml
011052.00	Bottle with measuring cup	500 ml
011053.00	Bottle with measuring cup	1.000 ml
011054.00	Canister	5 l

Increases pH value in Fresh- and Seawater **hw-addivit®**

hw-addivit® reliably increases the pH value and the carbonate hardness in seawater as well as freshwater aquariums without negatively affecting the ion balance or chemical composition of the aquarium water.

After the initial pH value adjustment with **hw-addivit®** the set value remains preserved and subsequent dosing is usually only required after changing the water.



Item no.	Packing	content
012011.00	Bottle with measuring cup	250 ml
012012.00	Bottle with measuring cup	500 ml
012013.00	Bottle with measuring cup	1.000 ml
012014.00	Canister	5 l

Lowers pH value in Fresh- and Seawater **hw-reduvit®**

hw-reduvit® reliably lowers the pH value and the carbonate hardness in seawater as well as freshwater aquariums without negatively affecting the ion balance or chemical composition of the aquarium water.

After the initial pH value adjustment with **hw-reduvit®** the set value remains preserved and subsequent dosing is usually only required after changing the water.



Item no.	Packing	content
012021.00	Bottle with measuring cup	250 ml
012022.00	Bottle with measuring cup	500 ml
012023.00	Bottle with measuring cup	1.000 ml
012024.00	Canister	5 l



hw-AktivCarbon® Activated Charcoal for Sea- and Freshwater

hw-AktivCarbon®

- pH value-neutral in seawater and freshwater
- Free of phosphates and subjected to constant quality assurance inspections
- Extremely high absorption capacity
- Reliably removes pollutants from aquarium water
- Reliably removes all types of water discolorations
- Ideal for neutralizing active medication residues after completing a treatment cycle

hw-AktivCarbon® utilizes the polar structure of many molecules by attracting the harmful substances like a magnet and reliably removes them safely from the water circulation. Moreover, many toxic substances chemically bond with the surface structure of **hw-AktivCarbon®** and are thus safely retained.

hw-AktivCarbon® binds and removes almost all organic and inorganic toxins from the aquarium water, including urea, protein compounds, chlorine, heavy metals, toxic organic and inorganic compounds. Chemical residues that today are regularly found in our tap water or reach the aquarium water when treating fish are reliably removed or neutralized.

How to use:

1 Liter **hw-AktivCarbon®** for approx. 1000 l

of aquarium water. Before use, briefly rinse with tap water to remove any material grit or fine particles caused by the transport.

Place **hw-AktivCarbon®** between 2 layers of filter cotton in the canister filter or in a mesh bag in the aquarium filter.

Usage duration:

After approx. 3 to 4 weeks, the **hw-AktivCarbon®** filter medium is saturated with pollutants and should be removed from the aquarium.



Item no.	Packing	content
034005.00	Polythene package	1 liter for approx. 1000 l of aquarium water
034010.00	Polythene package	2 liter for approx. 2000 l of aquarium water
034015.00	Polythene package	10 liter for approx. 10000 l of aquarium water

hw-ionic®

Special long-lasting filter medium for freshwater and seawater aquariums - prevents the formation of toxic nitrate concentrations in the first place.

- Special filter medium for seawater and freshwater aquariums
- Simplifies the startup phase of aquariums
- Binds ammonium and nitrite
- Prevents nitrites from leaching into the aquarium water
- Immediately active, no startup time needed
- Unique combination of special ion binding resins and pretreated activated charcoal
- Completely active up to 4 months



hw-ionic® is a special filter medium for freshwater and seawater aquariums specifically developed to securely bind ammonium and nitrite, the preliminary stages of toxic nitrate.

A unique combination of special activated charcoal and selected ion-binding resins capture the harmful substances securely using a negative pressure of 100 bar and does not release them back to the water even if the filter medium is supersaturated with toxins and pollutants. Dreaded and highly toxic nitrate can therefore not be created in the first place.

How to use:

1 Liter **hw-ionic®** for approx. 100 l of aquarium water.

Place **hw-ionic®** between 2 layers of filter cotton in the aquarium filter.

Do not rinse **hw-ionic®** before use. If you do, the resin component is lost. When switching the filter on, direct the first 2 to 4 liters into a bucket; then operate filter as usual.

Usage duration:

After approx. 3 to -4 weeks, the **hw-ionic®** filter medium is saturated with pollutants and should be removed from the aquarium.

Item no.	Packing	content
033005.00	Polythene package	1 liter for approx. 100 l of aquarium water
033010.00	Polythene package	2 liter for approx. 200 l of aquarium water
033015.00	Polythene package	10 liter for approx. 1000 l of aquarium water



hw®-Areometer with Thermometer

hw®-Areometer with Thermometer

For the perfect setting and control of seawater density.

The **hw®-Areometer** are precision instruments accurately calibrated and individually tested by experts. They are used to determine the density/salt content of seawater.

Scale division: 0,002
Measuring range: 1,020 bis 1,026
(color-coded)
Temperature range: 10-40°C
Temperature deviation: max. 0,25°C
(in 20°C to 30°C range)



Item no.	Packing	content
040010.00	Plastic storage box	1 pc.

hw-Airdiffuser® Specially Selected Lime Wood

hw®-Limewood-Airdiffuser

Produces very fine bubbles for protein skimming and oxygen enrichment.

Only lime wood with a very even and narrow pore structure are used for this aeration system.
The utilized lime wood originates exclusively from ecological forestry and was subjected to special storage conditions.

Available in two sizes:

Size 2: 45 x 19 x 19 mm
Size 3: 65 x 19 x 19 mm



Item no.	Packing	content
040045.00	Size 2 / box	*50 pc.
040065.00	Size 3 / box	*50 pc.

***Available from your specialty retailer: Individual units without sales packaging**

Specially Selected Lime Wood

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hw-ferrovit® Iron Complex for Freshwater Plants



hw-ferrovit® ensures plant growth in the freshwater aquarium is colorful and vibrantly green.

hw-ferrovit® reliably reduces bleach out (chlorosis) of aquarium plants.

hw-ferrovit® contains iron in a special form of deposit that can be used directly by plants and is released to the aquarium water gradually. However, this iron remains unavailable to most algae types.

Item no.	Packing	content
013011.00	Bottle with measuring cup	250 ml
013012.00	Bottle with measuring cup	500 ml
013013.00	Bottle with measuring cup	1.000 ml
013014.00	Canister	5 l

hw-tracevit® Trace Elements for Freshwater



hw-tracevit® replenishes aquarium water with all of the trace elements with a positive effect, which are consumed by metabolic processes.

Used regularly, **hw-tracevit®** reliably prevents deficiency symptoms in aquariums and promotes colorfulness and vibrancy of natural pigmentations.

When setting up new freshwater aquariums or when replacing large volumes of water with osmosis water or water with a low mineral content, **hw-tracevit®** restores the natural concentrations of trace elements in aquarium water.

Item no.	Packing	content
013001.00	Bottle with measuring cup	250 ml
013002.00	Bottle with measuring cup	500 ml
013003.00	Bottle with measuring cup	1.000 ml
013004.00	Canister	5 l

Multivitamin Complex for Fresh- and Seawater **hw-multivit®**

hw-multivit® contains all essential vitamins at the right quantities needed by ornamental fish. It strengthens their natural resistance to disease, and boosts their well-being, colorfulness, and willingness to spawn.

hw-multivit® is equally well suited for use in freshwater and seawater aquariums.

hw-multivit® is especially tried and trusted for the subsequent breeding of delicate young fish and larvae.



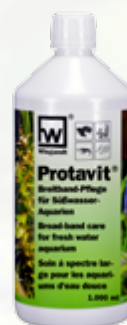
Item no.	Packing	content
012001.00	Bottle with measuring cup	250 ml
012002.00	Bottle with measuring cup	500 ml
012003.00	Bottle with measuring cup	1.000 ml
012004.00	Canister	5 l

Broad-Spectrum Care for Freshwater **hw-protavit®**

hw-protavit® turns regular tap water into aquarium water suitable for freshwater fish, reduces stress and the risk of infections when setting up new aquariums or replacing water.

Tap water contains many substances that are good for people but not so good for fish and microorganisms in your aquarium. In fact, those substances can be downright harmful.

hw-protavit® removes these harmful substances reliably and quickly and turns regular tap water into ideal, clear aquarium water for fish and plants. The biological balance is established much faster in the entire aquarium system and fish as well as plants can show off their vibrant colors.



Item no.	Packing	content
013021.00	Bottle with measuring cup	250 ml
013022.00	Bottle with measuring cup	500 ml
013023.00	Bottle with measuring cup	1.000 ml
013024.00	Canister	5 l

hw-ReMineral®

To re-mineralize reverse osmosis and low-mineral freshwater.

- **hw-ReMineral®** replenishes water with all required hardness components, minerals, and soil alkaloids in a highly pure form.
- **hw-ReMineral®** stabilizes the pH value and prevents deficiency symptoms.
- **hw-ReMineral®** makes it possible to easily adjust mineral content and conductance without negatively affecting plant growth.

hw-ReMineral® is an optimized combination of mineral salts, carbonate hardness, and overall hardness components, which are based on the natural model of most of the tropical waters. **hw-ReMineral®** is extremely pure, absolutely free of phosphates and nitrites, and ensures that no undesired byproducts reach the aquarium water.



The use of **hw-ReMineral®** not only enriches water with minerals but at the same time also raises the carbonate hardness and overall hardness and thereby increases the buffer capacity of the aquarium water. The pH value is stabilized and the risk of a dangerous pH (acid) crash is reliably avoided.

hw-ReMineral® has the optimal composition to create an ideal environment for healthy and biologically balanced aquarium water. The growth of filter bacteria is

encouraged, which improves the reduction of harmful substances in the aquarium. Possible deficiency symptoms caused by the exhaustion of minerals, such as the resulting hole-in-head disease, are avoided and healing is brought about. Reverse osmosis water as well as other soft waters are converted into the ideal starter water for properly keeping and breeding all types of freshwater fish.

Reverse osmosis water or fully demineralized water treated with **hw-ReMineral®** represents an overall ion distribution clearly more in line with nature than ever possible with plain tap water and your freshwater fish will reflect this positive change as well.

Item no.	Packing	content
032005.00	Plastic container	500 g mit Messlöffel
032010.00	Plastic container	1.000 g mit Messlöffel
032015.00	Plastic container	5.000 g mit Messlöffel

Increases pH value in Fresh- and Seawater **hw-addivit®**

hw-addivit® reliably increases the pH value and the carbonate hardness in seawater as well as freshwater aquariums without negatively affecting the ion balance or chemical composition of the aquarium water.

After the initial pH value adjustment with **hw-addivit®** the set value remains preserved and subsequent dosing is usually only required after changing the water.



Art.-Nr.	Packing	Inhalt
012011.00	Bottle with measuring cup	250 ml
012012.00	Bottle with measuring cup	500 ml
012013.00	Bottle with measuring cup	1.000 ml
012014.00	Canister	5 l

Lowers pH value in Fresh- and Seawater **hw-reduvit®**

hw-reduvit® reliably lowers the pH value and the carbonate hardness in seawater as well as freshwater aquariums without negatively affecting the ion balance or chemical composition of the aquarium water.

After the initial pH value adjustment with **hw-reduvit®** the set value remains preserved and subsequent dosing is usually only required after changing the water.



Item no.	Packing	content
012021.00	Bottle with measuring cup	250 ml
012022.00	Bottle with measuring cup	500 ml
012023.00	Bottle with measuring cup	1.000 ml
012024.00	Canister	5 l

hw-AktivCarbon® Activated Charcoal for Fresh- and Seawater

hw-AktivCarbon®

- pH value-neutral in seawater and freshwater
- Free of phosphates and subjected to constant quality assurance inspections
- Extremely high absorption capacity
- Reliably removes pollutants from aquarium water
- Reliably removes all types of water discolorations
- Ideal for neutralizing active medication residues after completing a treatment cycle

hw-AktivCarbon® utilizes the polar structure of many molecules by attracting the harmful substances like a magnet and reliably removes them safely from the water circulation. Moreover, many toxic substances chemically bond with the surface structure of **hw-AktivCarbon®** and are thus safely retained.

hw-AktivCarbon® binds and removes almost all organic and inorganic toxins from the aquarium water, including urea, protein compounds, chlorine, heavy metals, toxic organic and inorganic compounds. Chemical residues that today are regularly found in our tap water or reach the aquarium water when treating fish are reliably removed or neutralized.

How to use:

1 Liter **hw-AktivCarbon®** for approx. 1000 l

of aquarium water. Before use, briefly rinse with tap water to remove any material grit or fine particles caused by the transport.

Place **hw-AktivCarbon®** between 2 layers of filter cotton in the canister filter or in a mesh bag in the aquarium filter.



Usage duration:

After approx. 3 to 4 weeks, the **hw-AktivCarbon®** filter medium is saturated with pollutants and should be removed from the aquarium.

Item no.	Packing	content
034005.00	Polythene package	1 liter for approx. 1000 l of aquarium water
034010.00	Polythene package	2 liter for approx. 2000 l of aquarium water
034015.00	Polythene package	10 liter for approx. 10000 l of aquarium water

Filter Medium for Fresh- and Seawater

hw-ionic®

hw-ionic®

Special long-lasting filter medium for freshwater and seawater aquariums - prevents the formation of toxic nitrate concentrations in the first place.

- Special filter medium for seawater and freshwater aquariums
- Simplifies the startup phase of aquariums
- Binds ammonium and nitrite
- Prevents nitrites from leaching into the aquarium water
- Immediately active, no startup time needed
- Unique combination of special ion binding resins and pretreated activated charcoal
- Completely active up to 4 months



hw-ionic® is a special filter medium for freshwater and seawater aquariums specifically developed to securely bind ammonium and nitrite, the preliminary stages of toxic nitrate.

A unique combination of special activated charcoal and selected ion-binding resins capture the harmful substances securely using a negative pressure of 100 bar and does not release them back to the water even if the filter medium is supersaturated with toxins and pollutants. Dreaded and highly toxic nitrate can therefore not be created in the first place.

How to use:

1 Liter **hw-ionic®** for approx. 100 l of aquarium water.

Place **hw-ionic®** between 2 layers of filter cotton in the aquarium filter.

Do not rinse **hw-ionic®** before use. If you do, the resin component is lost. When switching the filter on, direct the first 2 to 4 liters into a bucket; then operate filter as usual.

Usage duration:

After approx. 3 to -4 weeks, the **hw-ionic®** filter medium is saturated with pollutants and should be removed from the aquarium.

Item no.	Packing	content
033005.00	Polythene package	1 liter for approx. 100 l of aquarium water
033010.00	Polythene package	2 liter for approx. 200 l of aquarium water
033015.00	Polythene package	10 liter for approx. 1000 l of aquarium water

hw-UV-water-sterilizer®

hw-UV-water-sterilizer®

Effective protection against microbes, bacterial water cloding, and floating algae in seawater and freshwater aquariums

Aquarists are familiar with these problems: No matter how many products you use or how much effort you put into cleaning your tank and its water, your fish are still swimming in murky water or the long-awaited successful breeding of your fish simply fails due to fungus on the egg batches...

This is usually caused by a high bacterial microorganism population in the water, water-clouding organisms, or floating algae. Their spread is effectively prevented with the use of hw-UV-water-sterilizers without damaging adverse effects.

How a hw-UV-water-sterilizer® works:

In a closed radiation chamber, the aquarium water flows directly past an artificial but high-intensity UVC radiation source.

Microorganisms, water-clouding bacteria, and floating algae exposed to this intensive radiation are either destroyed outright or damaged so they are no longer capable of cell division and thus die.

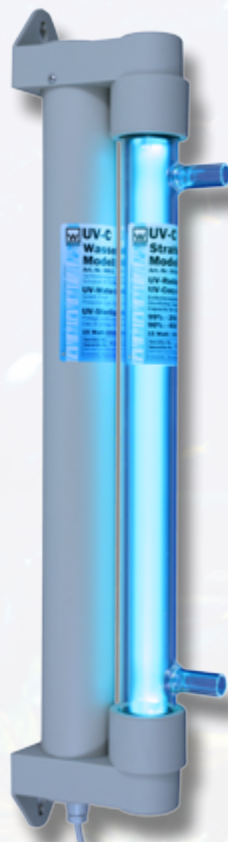
UVC water sterilization only irradiates the aquarium water flowing through the special glass jacket.

hw-UV-water-sterilizer® feature a special design proven to be effective in more than 100,000 installation, including research facilities, commercial applications, as well as the ambitious hobby aquaristics industry.

The extremely large contact surface to the direct UVC irradiation source, in conjunction with a low layer thickness (3 to 4 mm) of the water to be irradiated, results in an intensive irradiation otherwise only possible with equipment with nearly twice the wattage.

The utilized special glass jacket serves as UVC radiation reflector, which reflects the radiation back into the radiation chamber. This mirror effect significantly increases the intensity of the irradiation and provides a better performance yield. At the same time, the special glass jacket enables the precise function check of the UVC burner and a check of the condition of the radiation chamber.

The visible light emitted to the outside is completely filtered and thus entirely harmless (comparable to the light emitted by a standard neon tube...)

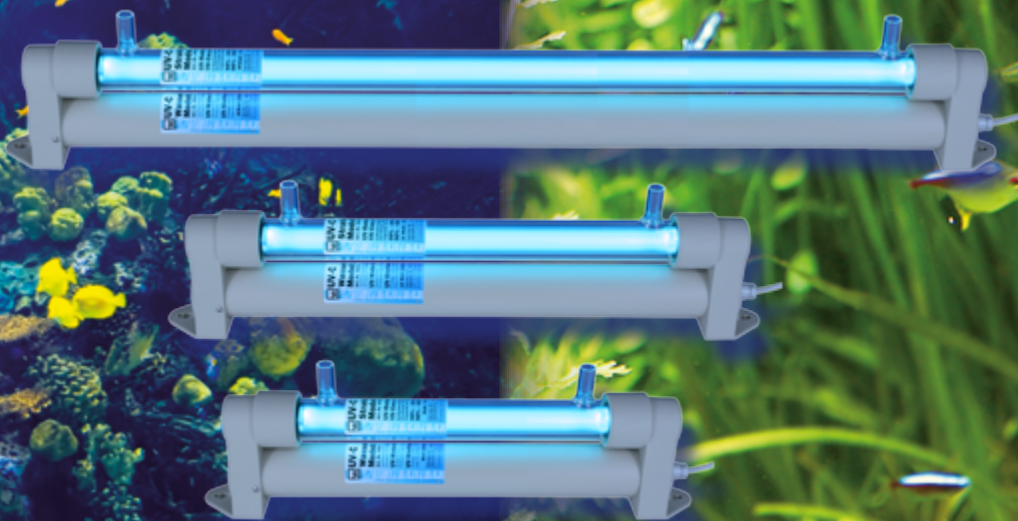


hw-UV-water-sterilizer®

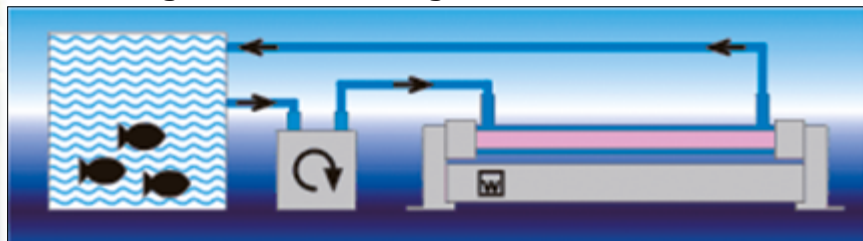
Water sterilized by the UVC irradiation is constantly mixed with non-sterilized water from the aquarium (nitrification bacteria in the filter and on the bottom of the tank are not damaged by UVC rays). The process therefore does not completely „sterilize“ the entire water volume of water in the aquarium but instead significantly reduces the microbial and germ count (max. reduction is approx. 98% in the entire aquarium system).

This fact is very important and necessary since the microbes remaining in the water (approx. 2 to 3%) maintain the antibody production of the fish against pathogens and strengthens their immune system.

It goes without saying that germs in an enclosed, comparably small ecological system of an aquarium, spread for more quickly than in natural waters. The exposure of aquarium water to UV-radiation ensures a natural balance without constantly exposing the aquarium inhabitants to countless number of germs, which would inevitable result in their immunity being seriously weakened.



Schematic diagram / water circuit integration:



hw-UV-water-sterilizer®

hw-UV-water-sterilizer® for seawater aquariums:

- Standard method to optimize water quality and care conditions
- Effectively prevents bacterial tissue damage of sensitive corals
- Coral reproduction is significantly easier (specially through fragmentation) since the risk of bacterial damage to the coral tissue is reduced
- Visible reduction of the risk of bacterial skin infections, fungal problems, and infectious diseases
- Elimination of cloudy water due to algae and bacteria
- Many attempts at breeding that previously failed due to increased microbe concentrations are now possible and successful

hw-UV-water-sterilizer® for freshwater aquariums:

- Secret weapon of discus breeders against bacteria and fungi in the sensitive egg batches
- Top-notch water quality just as in the low-microbe pure water regions of local waters
- Visible reduction of the risk of bacterial skin infections, fungal problems, and infectious diseases
- Beseitigung von Wassertrübungen durch Algen und Bakterien

hw-UV-water-sterilizer® for garden ponds:

- Special method to visually clear pond water and reduce germs
- Reduction of the risk of bacterial skin infections, fungal problems, and infectious diseases
- Elimination of cloudy water due to algae and bacteria

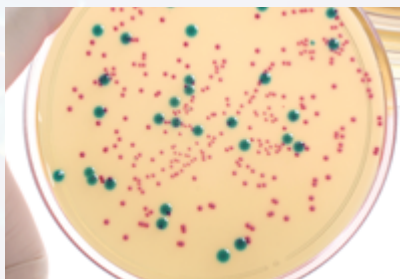
hw-UV-water-sterilizer®:

Highly effective and extremely long lasting

The UVC burners installed in **hw-UV-water-sterilizer®**, as in all light and radiation sources, convert only part of the supplied energy into effective UVC radiation (= so-called „efficiency: of the radiation source). This means that the higher the degree of efficiency of the UVC burner the greater its efficiency in using electricity.

hw-UV-water-sterilizer®

Water sample of a freshwater aquarium (1000 l tank) incubated on culture medium. Before and after use of a hw-UV-water-sterilizer®



Water sample taken from a 1000-l aquarium before using a hw-UV-water sterilizer model 1000 (30 W).



Water sample taken after approx. 48 hours using a hw-UV-water sterilizer model 1000 (30 W)

hw-UV-water-sterilizer®	Model 350	Model 500	Model 1000	Model 2000	Model 3000	Model 4000
Water volume in circulation	350 Liter	500 Liter	1.000 Liter	2.000 Liter	3.000 Liter	4.000 Liter
Sterilization 90%	300 l/h	450 l/h	900 l/h	1.500 l/h	2.000 l/h	3.000 l/h
Sterilization 99%	175 l/h	250 l/h	500 l/h	1.000 l/h	1.500 l/h	2.000 l/h
Length of unit	450 mm	560 mm	1.020 mm	1.330 mm	1.020 mm	1.330 mm
Diameter of connection nozzle	15 mm (tube 12/16)	15 mm (tube 12/16)	15 mm (tube 12/16)	15 mm (tube 12/16)	15 mm (tube 12/16)	20 mm (tube 16/22)
Watt	10 Watt	15 Watt	30 Watt	36 Watt	55 Watt	75 Watt
Portion of pure UV-C-irradiation	25 %	33 %	40 %	42 %	32 %	33 %
UV-C output	2.500 mW	4.900 mW	12.000 mW	15.000 mW	17.500 mW	25.000 mW
Average life time	8.000-12.000 h	8.000-12.000 h	8.000-12.000 h	8.000-12.000 h	8.000-12.000 h	8.000-12.000 h

IMPORTANT:

Replacement of the UVC burner (burner / glass jacket unit) in hw-UV-water-sterilizers®

The UVC burners in **hw-UV-water-sterilizers®** are characterized by an above-average service life. Nevertheless, the burners must be replaced from time to time.

Safety for your and your aquarium comes first:

In order to ensure complete operating safety and reliability, the UVC burners in **hw-UV-water-sterilizers®** are replaced as one sealed, original **hw®-UV-C-burner/glass jacket unit**. This completely eliminates the risk of defective seals, misaligned components, or other possible safety-related problems!

We recommend the following steps to replace the unit:

Order a suitable **hw-UV-spares-radiation-part®** (**hw®-UV-C-burner/glass jacket unit**) and replace the part (incl. starter) yourself using the enclosed installation manual in the comfort of your own home.

After the **hw-UV-spares-radiation-part®** (**hw®-UV-C-burner/glass jacket unit**) and the enclosed starter has been replaced, the **hw-UV-water-sterilizer®** functions like a new unit.

Installation tips:

Selecting connection tubes and connectors:

It is preferred to use a normal aquarium tube to install the **hw-UV-water-sterilizers®** into the water circuit of the aquarium.

The connection tube can and should have a smaller inner diameter (3 to 4 mm) than the outer diameter of the connection nozzle.

Before slipping the tube over the connection nozzle, briefly immerse the end of the tube in hot water (approx. 70 to 90°C).

This makes the tube much more flexible and it will stretch a bit for and therefore is easily slipped over the glass nozzle.

After positioning the tube, you can secure it in place additionally using the enclosed hw®-plastic-clips.

Do not use any metal clips and avoid applying a heavy lever action to the attached tubes.

hw®-UV-water-sterilizer

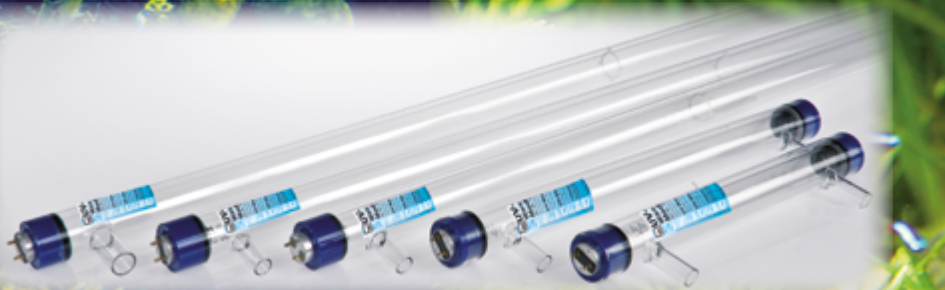
Complete Unit



Item no.	Description	Aquarium volume	Graden ponds
060010.00	hw-UV-water-sterilizer Model 350 / 10 Watt	350 Liter	1.000 Liter
060015.00	hw-UV-water-sterilizer Model 500 / 15 Watt	500 Liter	1.500 Liter
060030.00	hw-UV-water-sterilizer Model I 1000 / 30 Watt	1.000 Liter	3.000 Liter
060036.00	hw-UV-water-sterilizer Model 2000 / 36 Watt	2.000 Liter	6.000 Liter
060055.00	hw-UV-water-sterilizer Model 3000 / 55 Watt	3.000 Liter	9.000 Liter
060075.00	hw-UV-water-sterilizer Model 4000 / 75 Watt	4.000 Liter	12.000 Liter

hw®-UV-water-sterilizer

Spare Radiation Part



Item no.	Description	Aquarium volume	Graden ponds
063010.00	hw-UV-spares-radiation-part 350 / 10 Watt	350 Liter	1.000 Liter
063015.00	hw-UV-spares-radiation-part 500 / 15 Watt	500 Liter	1.500 Liter
063030.00	hw-UV-spares-radiation-part 1000 / 30 Watt	1.000 Liter	3.000 Liter
063036.00	hw-UV-spares-radiation-part 2000 / 36 Watt	2.000 Liter	6.000 Liter
063075.00	hw-UV-spares-radiation-part 4000 / 75 Watt	4.000 Liter	12.000 Liter

Research



Production





Wiegandt GmbH

Aquaristics Products

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Freitag von 8.00 Uhr bis 13.00 Uhr

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Internet: www.hw-wiegandt.de

Your specialty retailer: