

WHAT IS AKTIVKOHLE PLUS?

AKTIVKOHLE PLUS is a blend of exceptionally absorbent resins and physically steam activated coconut charcoal for the chemical and biological filtering of fresh and marine water aquariums.

It is an exclusive material of PRODAC INTERNATIONAL with a broad spectrum of action because through the carbon it "adsorbs" dyes, organic and medicinal residues, toxins and excrements and through the resins it neutralises nitrates and phosphates.

AKTIVKOHLE PLUS is pre-washed in order to avoid altering of the pH, to keep the resins moist and to keep them active, therefore the product contained in the package is ready for use.

OVERVIEW

AKTIVKOHLE PLUS thanks to the presence of activated vegetable carbon from coconut, has an extremely porous structure (microscopic pores); this porosity offers it an enormous specific surface area, giving it an exceptional filtering power.

HOW DOES AKTIVKOHLE PLUS WORK?

- Coconut charcoal adsorption mechanism
- Absorption of resins

Thanks to its structure and chemical composition, coconut charcoal easily adsorbs non-polar compounds such as organic compounds that take the name of Dissolved Organic Compounds (DOC).

The presence of the resins that absorb nitrates and phosphates creates a perfect combination for your aquarium, making the water clear, clean and safe for your fish.

HOW IT WORKS

AKTIVKOHLE PLUS must be poured into a fine mesh bag and placed in the external filter or biological filter under the recirculation pump so that the water passes through it completely.

In the aquarium *AKTIVKOHLE PLUS* will immediately filter out substances such as dissolved organic carbon (DOC), antibiotics, pesticides, toxins, nitrates and phosphates; it should be used whenever using medicines in the aquarium, in case of cloudy water or in case of high nitrate and/or phosphate values.

Overly high values of NO nitrates₃ and PO phosphates₄ can cause damage not only to fish but also to plants. The main causes for which high nitrates and phosphates occur are overcrowding in the tanks, poor water exchange and too much nutrition that causes food scraps which will inevitably turn into waste substances and consequently into pollutants.

Nitrates and phosphates, if present in too high a quantity, can become the cause of the presence of algae; it is therefore important to maintain the correct balance between nitrates and phosphates, avoiding exceeding the recommended values for your aquarium.

"*Prevention is better than cure*" but with *AKTIVKOHLE PLUS* the treatment is fast, effective and easy to use.





12

Days

14

Remember that AKTIVKOHLE PLUS is a filter material with very specific purposes and must be used for limited periods of time as indicated in the instructions; it is not possible to regenerate it, therefore, once used, it must be disposed of according to the instructions on the package.

AKTIVKOHLE PLUS does not alter the values of the aquarium water (pH, GH, KH).

TESTS PERFORMED

We tested *AKTIVKOHLE PLUS* in a 50L aquarium. The bottom of the aquarium is made up of *FONDOVIVO*. The biological filter is made up of *FILTERWATTE* + *BIOCLARO* + *AQUACIL*. The pump is *MAGIC PUMP 350*. The aquarium was planted with Vesicularia montagnei and Cryptocoryne Willisii.

Before inserting *AKTIVKOHLE PLUS* into the filter compartment under the recirculation pump, we measured the nitrate value with *PRODAC TEST NO3* and the phosphate value with *PRODAC TEST PO4*.

"1" represents the first day of use and the values of the aquarium before the introduction of AKTIVKOHLE PLUS.

For the following 14 days we measured the nitrate and phosphate values and represented the values found in the graphs shown below.





DISCUSSION

As can be seen from the graphs above, the use of *AKTIVKOHLE PLUS* significantly helped the reduction of nitrates and phosphates, halving the value of phosphates and nitrates already after 4 days, thus making the water values safer for fish and plants.

CONCLUSIONS

AKTIVKOHLE PLUS is the easiest, fastest and best performing system for the filtration of water in the aquarium in case of high nitrates and phosphates or in case of cloudy water or following the use of medicines.

AKTIVKOHLE PLUS is part of the PRODAC line of filter materials and is a fundamental product for the health of your aquarium.