

# Systemic plant care



**Splendid  
aquarium plants  
due to perfectly  
balanced care**

# sera plant care

The balanced  
complete system for  
individual and effective  
plant care

## Basic fertilizers

### **sera florena**

for aquatic plants that  
take up nutrients mainly  
through the leaves

### **sera florenette**

for aquatic plants that  
take up nutrients mainly  
through the roots

## Systemic fertilizers

### **sera flore 1 carbo**

the alternative  
carbon source

### **sera flore 2 ferro**

extra iron  
for plants with  
high consumption

### **sera flore 3 vital**

rare nutrients  
for better stamina

### **sera flore 4 plant**

main nutrients  
for plant aquariums

The innovative **sera** plant care system optimally fulfills the requirements of the aquarium plants. The balanced system, consisting of two basic fertilizers and four systemic fertilizers, allows precise, uncomplicated and flexible plant supply without unnecessarily polluting the water.

- ✓ excellently tolerated by invertebrates
- ✓ does not contain phosphate nor nitrate\*
- ✓ natural algae prevention
- ✓ scientifically tested



\*except macro nutrient fertilizer  
sera flore 4 plant





Plants are a very important component of the aquarium habitat. Besides their decorative effect, they structure the tank and provide shelter for the animals kept in there, thus creating a natural, low-stress environment.

Furthermore, the aquarium plants withdraw numerous pollutants as well as algae nutrients from the water. A biological equilibrium establishes more quickly and more stable in tanks with healthy, strongly growing plants.

The **sera** plant care range allows tailor-made supply so the aquarium plants can optimally fulfill their important tasks. Using efficient technology and care products from one source ensures perfect balance.



# Technical equipment, accessories and bottom ground

The **sera** complete range for all aspects of aquarium plant care allows creating best conditions for healthy, splendid aquatic plants in an easy and balanced way.



Ideal light conditions for full photosynthesis performance by innovative, energy saving LED technology.

Stable water parameters and splendid plant growth by improved water flow through the bottom ground due to a continuous temperature gradient.



The durable, stainless steel maintenance tools **sera floretool S** and **sera floretool P** make design and plant maintenance measures a pleasure.

The functional **sera** bottom ground products ensure ideal preconditions for firm root growth, optimized bottom aeration without rot zones, an improved bottom filter activity as well as a lasting basic supply with important nutrients.



# Nutrients

Besides light, plants also require a number of inorganic nutrients. Aquatic plants either take them up directly from the water via their leaves, or they withdraw them from the bottom via their roots. Healthy growth requires all essential nutrients being available in sufficient amounts. The most common deficiencies are caused by insufficient supply of carbon, nitrate, phosphate, potassium, iron or magnesium (regular control using the **sera** water test kits).

Insufficient supply can either occur if the original water is low in these substances, or by consumption, or because the substance is not present in water lastingly and stable (as is the case with iron). If the plants, for instance, look pale, become blotched or grow poorly this is most probably due to insufficient nutrient supply. However, the environmental conditions (such as pH value, lighting, temperature) should be checked, and the possibility of a disease (e.g. fungi and viruses) must be taken into account.

**sera** developed the innovative **sera** plant care system for a continuous nutrient supply and, accordingly optimal growth conditions. Its flexibly useable balanced components allow the effective supply of the plants with all required nutrients in optimal bioavailability without unnecessary pollution by excess nutrients.



Carbon deficiency is one of the most common reasons for insufficient growth of aquatic plants. The **sera flore CO<sub>2</sub> fertilization system** ensures safe and intense supply!

**Advice:** You can obtain data about the special requirements of single plant species from your specialized retailer or from literature. Nutrient requirements generally increase with plant density, carbon dioxide supply and lighting intensity/strength.



# Basic fertilizers



*Basic fertilizer for aquatic plants that take up nutrients mainly through the leaves*

## sera florena

The universal basic fertilizer provides aquatic plants that mainly take up their nutrients through the leaves with all important minerals and trace elements they require for healthy, colorful growth. The depot effect (including a UV stable iron complex) reliably prevents deficiencies without polluting the water with unnecessary remainders.

**Application:** depot basic fertilization for plants that mainly take up their nutrients through the leaves



**sera florena** and **sera florenette** – in perfectly balanced combination and long term effect – for the extensive, uncomplicated full supply of the different aquatic plants.



*Basic fertilizer for aquatic plants that take up nutrients mainly through the roots*

## **sera florenette**

**sera florenette** is the ideal basic fertilizer for aquatic plants that take up nutrients mainly through the roots. The bottom tablet with depot effect provides the plants with all important minerals and trace elements for healthy and colorful growth. Among others, natural growth enhancers make the starting phase easier.

**Application:** depot basic fertilization for plants that mainly take up their nutrients through the roots. In case of mixed plant stock, apply alternating weekly.





# Systemic fertilizers

The **sera** systemic fertilizers close specific maintenance gaps. For the tailor-made supply even of very fastidious aquarium plants.



## *The alternative carbon source*

### **sera flore 1 carbo**

Carbon deficiency is likely the most common growth limiting factor for aquatic plants. **sera flore 1 carbo**, a liquid fertilizer with carbon sources easily accessible for plants, provides an uncomplicated, reasonably priced alternative or addition to the CO<sub>2</sub> fertilization system.

**Application:** daily fertilizer for the growth supporting carbon supply





*Extra iron for plants with high consumption*

## **sera flore 2 ferro**

Iron, one of the most important plant nutrients, is quite unstable in aquarium water and remains bioavailable only for a short time. Especially in case of increased iron requirements (high plant density, red and fast growing plants, “high performance aquariums”), deficiencies can thus arise quickly (yellowish, poorly growing plants). **sera flore 2 ferro** contains lastingly available iron chelates that remain stable for days even under strong UV lighting (UV-C clarifiers). Tolerated by shrimps!

**Application:** liquid depot fertilizer for optimized iron supply



# Systemic fertilizers



*Rare nutrients  
for more stamina*

## sera flore 3 vital

Aquarium water is often lacking in trace elements and vital substances. The liquid daily fertilizer **sera flore 3 vital** reliably closes these dangerous supply gaps. The aquatic plants continuously supplied with essential, valuable micro nutrients and vitamins in an appropriate dosage become healthier, stronger and more beautiful. Their stamina is lastingly increased.

**Application:** vital substance fertilizer for strengthening stamina







**sera flore 4 plant**

**Application:** macro nutrient daily fertilizer for growth support

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