



## **2. Position, tank preparation and required water values for your discus aquarium**

### **The ideal position**

The ideal position for your discus aquarium is an lived-in room (living room or kitchen) so that discus fish show their natural behaviour in the presence of people. Our fish are used to people continuously going past their tank and looking after them. They enjoy having people around.

Directly behind a door is not a good place because this will make the fish very nervous. Keeping the fish in a garage or cellar only used infrequently by people would also make them more nervous. In order to prevent excessive build-up of algae, do not place the aquarium directly next to a window or in direct sunlight.

**The aquarium base must be clean and level.** Just one grain of sand is enough to cause a glass pane in a full tank to crack. The base for the aquarium should also be very robust because a full tank with 180 litres of water can weigh over 250 kilos. Aquarium bases are designed for this purpose and in addition offer space to store fish feed and accessories.

### **N B:**

**Before installing large tanks check the structural properties of the room!**

**When you have found a suitable place, set up the tank and clean it first as described below (without fish and plants):**

#### **1. Cleaning**

##### **1.1 A new aquarium**

First clean the new tank with a vinegar solution diluted with water. Wash the insides of the glass panes and the silicon joins thoroughly with the vinegar solution and then dry them with a cloth to ensure that no chemical residue can affect the quality of the water.

##### **1.2 A used aquarium**

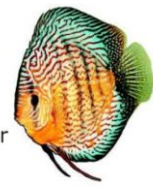
**1.2.1** Disinfect the used aquarium with hydrogen peroxide (can be purchased from chemists).

##### **1.2.2 Dosage of the hydrogen peroxide solution:**

0.5 litres of a 30 % hydrogen peroxide solution to 180 litres of water.

**Avoid direct contact with the hydrogen peroxide. It can cause chemical burns!**

**1.2.3** Fill the aquarium with water and mix the above dosage of the hydrogen peroxide solution in with the water. To disinfect the tank, filters, accessories (net) and the water: allow the solution



to take effect for 24 hours. Then change 99 % of the water and fill the aquarium with fresh tap water. In this way you will remove bacteria and diseases.

## **2. Add substrate**

The ideal substrate is sand (siliceous sand) or fine gravel (both can be purchased in pet shops). Rinse the gravel in running water to remove the fine stone dust which can make the water go cloudy. A strainer is ideal for rinsing gravel under the tap.

After rinsing the gravel, spread it evenly over the floor of the aquarium. If you decide to use fine siliceous sand, there is not need to rinse it beforehand; you can add it directly to the aquarium.

## **3. Fill aquarium with tap water**

We recommend using a bucket or hose to fill the tank. Remember to use a **suitable bucket for the sole purpose** of changing the water since residue from cleaning agents should not end up in the aquarium under any circumstances.

**Use cold water to fill the aquarium (the exception is when changing 90 % of the water)** because many boilers and water pipes contain copper and this can the water in your aquarium to become contaminated with heavy metals. Allow the tap to run for some time so you do not use water which has stood for some time (may contain pollutants). Normally it is enough **if you allow the cold water to run for five minutes.**

if you use a hose to change the water, allow the water already in the hose to drain out because it could contain softeners and these should not end up in the water in the aquarium.

## **4. Heating rod, thermometer and ideal temperature**

To heat the water in the aquarium, attach the heating rod to a side or rear pane and set it to 29 °C.

Ensure that **the heating rod is under water before turning it on, otherwise it will burn out!** The heating rod should be connected to the power for continuous operation. After c. 24 hours the required temperature of 29 °C for a tank of 180 litres will be reached. You can now start to run in the filter (as described under 7).

Attach an **interior thermometer** to the front pane of the aquarium so that you can read and check the current water temperature at any time. The appropriate water temperature for discus fish is c. 29-30 °C.



## **5. Diaphragm pump**

In order to ensure good oxygen content of the water, a diaphragm pump (with an outlet stone) will do good service and is highly recommendable. The diaphragm pump should run continuously, also when running in the filters because the new bacteria will use up a large amount of oxygen.

## **6. Selection and use of filters**

When you have decided on a filter system, you can now install it.

### **What to do when an inner filter fails:**

**Should an inner filter fail, do not simply reconnect the faulty filter to the electricity supply because the bacteria will die off after 20 minutes and sludge will start to form which would damage your discus fish.**

Clean the fault filter thoroughly with tap water to remove all dead bacteria and contaminants. Rinse the cleaned filter and reconnect it and run it in. Within two weeks the filter will almost have reached its former level of performance. Installation of a second inner filter would pay off in such cases.

### **Run in filter, create starter bacteria culture**

Do not add the required starter bacteria culture (can be purchased at pet shops) until **the required water temperature of 29 °C for your aquarium is reached. From now on you should add some food to the empty tank once a day**, e.g. discus frozen food (no dried food because the bacteria are supposed to adapt to breaking down animal protein). "Feeding an empty tank" is important because the bacteria are supplied with nourishment and multiply. You will have the bacteria culture needed for your fish stock (filter performance) after around two weeks. The filter system must run continuously.

## **7. Activated carbon**

As a safety precaution you should keep a bag with activated carbon (available as a filter medium in pet shops) for two to three weeks in the aquarium without any fish. The activated carbon will filter any contaminants out of the water and must be removed from the tank after three weeks at the latest! It is **imperative that you remove the bag with the activated carbon** because the carbon will release the contaminants back into the water when it is saturated!

## **8. Lighting for the aquarium**



Do not switch on the lamps for the aquarium until after putting in the fish (turn on one day later so that the fish have time to adjust to their new surroundings). The lamps can be set via a timer (our recommendation is 12-14 hours daily).

## **9. Checking the required water values**

(pH value, nitrite, nitrate, ammonium, ammoniac, dropper indicator kits are available from pet shops).

When you feed the empty tank nitrite will form in the water (can be ascertained using a dropper indicator kit). After c. two to three weeks the nitrite content will have been broken down and the water in the aquarium is ready for plants and fish.

**Before adding the fish** test the water for its values. There should be no traces of ammonium, ammoniac and nitrite because they are poisonous for discus fish. These elements should have been broken down already. The pH value should be between 6.5 and 7.8. In order to protect the fins and mucous membranes of the fish you can add a water purifier shortly before you put the fish in the aquarium. The way is now clear for successful population of your aquarium with fish.