



## DISCUS X FARM CO. LTD

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## User Guide



## Description

**PROTECT X™** is employed as an essential and reliable disinfectant for fish for many years with its good efficacy and low toxicity to fish, shrimp and aquatic environments. PROTECT X is used in salt, brackish and freshwater environments.

## Indication of use

**All-round disinfectant** disinfection of tanks and ponds, nets, equipment. PROTECT X ensures that pathogenic microorganisms are rapidly and effectively destroyed.

**Safe in use** as with any biocide protection measures are required but can be handled by using standard personal equipment. PROTECT X is the safe alternative for traditional and more dangerous chemicals. It is non-toxic for fish and shrimp at effective dosage and does not leave residues in the animals.

**Safe for the environment** with its readily biodegradable action, is the safe alternative for dangerous chemicals does not accumulate in riverbeds and is not toxic to the aquatic environment.

**Efficiency** PROTECT X is effective against many microorganisms related to aquarium applications. A few of them are indicated below, but the complete activity spectrum of PROTECT X is much wider.

**Bacteria** *Aeromonas salmonicida* (Furunculosis), *Flexibacter maritimus* (Marine columnaris), *Flavobacterium branchiophilum* (BGD), *Flavobacterium columnaris* (Columnaris), *Vibrio anguillarum* (Vibriosis), *Vibrio harveyi*.

**Viruses** Hemorrhagic septicemia virus

**Fungi** *Saprolegnia* ...etc.

**Parasites** *Gyrodactylus salaris*, *Ichthyobodo necator* (Costia), *Ichthyophthirius multifiliis* (White spot), *Neoparamoeba pemaquidensis* (Amoebic Gill Disease), Trematodes.

## Before use

- Read the full user guide carefully and apply all the recommended instructions.
- A recommended hospital tank will only contain an air stone for aeration and a heater if needed.
- Daily water change should be adopted as means of controlling water quality during treatment. Adding water conditioner that binds and neutralize chlorine AND ammonia is highly recommended.
- It is recommended to stop feeding, during the treatment if you still want to feed or must feed, do it lightly and keep more attention to siphoning away any food or fish waste daily, also in this case you **MUST** be using water conditioner that binds and neutralize chlorine AND ammonia.
- Always start by cleaning the aquarium, whipping the glass and having clean treated water at the correct conditions for the fish.
- In case you still treat in a display tank follow these steps to increase the success rate and reduce risk. Wipe the glass surface, siphon the substrate, and any waste accumulated under or around décor, filter media...etc.
- Take care when cleaning the filter media not to do it with chlorinated water or any cleaning agent, or over cleaning it in a way that will remove most or all the beneficial bacteria(biofilm). Some products will directly kill the filter bacteria, such products will have a warning on the back of the package.

## Method of use

Please use this table to identify the correct dose based on your water conditions

pH	Soft Water (GH <6°dH) ml/10L	Hard Water (GH >6°dH) ml/10L
6.0	12.5	35
6.5	25	50
7.0	50	75
7.5	90	90
8.0	100	100

**Caution:** This step is very important; you need to know the pH and GH of your water to determine the safe dose level. Using a high dose than what is allowed based on your pH/GH level may cause serious damage or death to the fish. If in doubt or on the boarder go for the lower concentration.

### Discus and koi short bath

First step prepare dilute PROTECT X stock solution by dissolving 2 level spoons (included) or 2g - using weight measurement is much more accurate- of PROTECT X powder in one liter of water mix well until completely dissolved. Place the fish in a tub with clean water (with no chlorine or chloramine and without any chlorine removal chemicals) add an air stone for aeration. Add the amount indicated in the table above for every 10 liters.

Keep the fish in the bath for a maximum of 5 hours, keep an eye on the fish during this period. If you notice signs the fish can't tolerate the bath anymore, remove it to its aquarium. This bath can be repeated daily up to 5 days.

### Example

If your water has pH 7.0 and GH = 6 dH, then the corresponding dose is 50ml from the stock solution to every 10 Liter.

If your bath is 30L you will add 50ml for every 10L =  $50 \times 3 = 150\text{ml}$ .

### Discus long bath

Add 1 level spoon (included) or 1g PROTECT X powder to every 330L of aquarium water. This will produce a concentration of 3mg/L. Use this bath for 24hrs followed by at least 90% water change and can be repeated up to 4 consecutive days.

### Other ornamental fish

PROTECT X has not been tested extensively on other ornamental fish so it is advised to practice caution, try lower concentration first and keep an eye on the fish. At first signs of distress end the treatment. Here again water hardness as well as pH are two important parameters to consider to adapt the concentration to your own conditions. Always make a small test first.

## OTHER APPLICATIONS

### Tank disinfection

During the production stops, it is of major importance to thoroughly clean and disinfect the tanks and ponds when they are empty to avoid contamination of the next production lot. Start by cleaning to remove the organic matter and then disinfect by spraying or rinsing with a 1% PROTECT X solution (or with a 2% in case of heavy contamination).

**How to prepare 1-2% solution**, dissolve 1 spoon (1g) for every 100ml water (for 2% use 2 spoons).

**Equipment disinfection** Spray all equipment used in the fish farm with a 1% PROTECT X solution or dipped the equipment into the PROTECT X solution for 30 min.

**Net disinfection** a 1-2% PROTECT X solution is used for net disinfection, with a contact time of 30 min.

### Stagnant fresh water ponds/storage tanks

PROTECT X is added at a concentration of 3 ppm (3 g/1000L) once a week. Water pH and hardness are two important parameters to consider to optimize the PROTECT X concentration. As a rule, with acidic pH, a lower concentration should be used and with increasing water hardness, a higher PROTECT X concentration is recommended. Also, if using a biofilter in a recirculated water system, special attention must be taken.

### Fish egg disinfection

To reduce surface contamination, fish eggs can be dipped in a 1 g/l PROTECT X solution for 1-5 min followed by a clean water wash. The time can change based on water condition and size of the eggs, it is better to do this dip in neutral to high pH and normal to hard water, rather than soft acidic water. Always start by the minimum time and move upwards to get the maximum safe time.

Application	Concentration	Remark
Tank and pond disinfection	1% - 2%	
Equipment disinfection	1%	
Net disinfection	1%	
Well boat disinfection	1%-2%	
Footbath	2%	Renew as often as needed
Water treatment - Fresh water raceway ponds	10-20 mg for 1 hr	Can be repeated up to 4 times of consecutive or alternate days
Water treatment - Stagnant water ponds	3 ppm once a week	

## Discus X disease prevention philosophy

- This procedure is applied successfully in Discus X Farm facility to prophylactically clean breeding stock before adding to the central filtered breeding system.
- Following this method will ensure a more enjoyable hobby in your main display aquarium, free of reoccurring fish health issues like not growing properly, dull coloration, loss of appetite or even death.
- This happens because we allowed many types of external and/or internal parasites to enter and live in our main tank, and will be ready to cause disease in at any time the fish are stressed due to water conditions, bullying, heavy parasite load, infection pressure ... etc.
- Thus, Discus X recommends aquarium professionals as well as keen to always apply our QT kit Procedure using our QT kit PRO on any new fish in hospital tank prior introduction to display aquarium, fish room ...etc. to achieve the above results.

## Precaution and storage information

Store in a cool (room temperature) dry place, don't place in a fridge to avoid water condensation on and inside the package in humid environments.

## Ingredients

Chloramine-T

## Warning

Not for human consumption or animals meant to be used for human consumption.  
Keep out of reach of children and pets.  
For use with Ornamental fish only.