## **Aquarium Solutions® Ich-X® SW**

# Saltwater Aquarium Fish Medication

#### **PURPOSE AND BENEFITS**

Aquarium Solutions® Ich-X® SW is a convenient, pre-diluted, formulation of formalin (37% formaldehyde solution) which is a universally recognized as a effective medications for the treatment and control of diseases in saltwater aquarium fishes caused by fungi, protozoa and certain metazoans. When used as directed Aquarium Solutions® Ich-X® SW will control or prevent diseases of fishes caused by the following disease organisms: Cyptocaryon (saltwater "ich"), Amyloodinium, the common external fungal infections, certain external bacterial infections and diseases caused by monogenea and digenea. This is the definition of synergism.

### GENERAL DIAGNOSIS AND TREATMENT OF "SALTWATER ICH" (CRYPTOCARYONIASIS)

**DISEASE IN MARINE AQUARIUM FISHES** The following is a brief summary of the clinical signs often associated with "saltwater ich"; it is intended *only* as an aid for the beginning aquarist, and is not to be considered a definitive diagnostic key. It is important that the aquarist consult appropriate references for more specific information regarding aquarium fish diseases. Where possible, skin scrapes and/or gill smears should be made and examined by a qualified aquarium fish disease diagnostician (NOTE: few veterinarians are either qualified or interested in diagnosing aquarium fish diseases).

The signs of "saltwater ich" in fishes is usually evident by the appearance and persistence of numerous, small (but visible) white spots on the fishes' skin, scales, eyes and fins. The disease is often called "white spot disease". These spots are known as cysts. It must be understood that the cysts are usually found on the gills of the diseased fishes where they are not visible without inspecting the gills. The only outward sign of the involvement of the fishes' gills is labored respiration that is often accompanied by a drastic darkening or lightening of the fishes overall coloration. Fishes with "saltwater ich", where the white spots are not yet visible on the body will usually exhibit lethargy and repeated "flashing", or scratching and scraping, against sides or bottom or against objects in the aquarium.

#### CLINICAL SIGNS AND TREATMENT OF OTHER DISEASES OF AQUARIUM FISHES

The following signs are general and may appear with some or all of the signs indicated above. **DISEASES CAUSED BY FUNGI** (**SAPROLEGNIASIS**): Saprolegniasis is often the easiest fish disease to properly diagnose. In most cases likely to be observed in aquarium fishes areas of necrotic (dead) tissue will be covered with whitish, hairy, or "cottony" patches. This fungal disease is almost always a secondary infection caused by stress or injury. Treating the aquarium, as directed, with **Aquarium Solutions® Ich-X®** in addition to directly swabbing the visible lesions on the fishes will often affect a cure in 24 hours or less. Swabbing must be done with a clean, cotton swab, and the a swab must never be dipped more than once into the container of **Aquarium Solutions® Ich-X®**. Be sure to have plenty of clean, dry swabs ready to use. **AMLYOODINIASIS (VELVET, GOLD DUST DISEASE, RUST DISEASE)**: This disease is common to saltwater tropical fishes. The skin of diseased fishes appears to have been dusted with a fine powder.

SPECIFICATIONS DOSAGE: Aquarium Solutions® Ich-X® SW is dosed at a rate of one teaspoonful (=~5 mL) per 10 gallons of water. This produces a nominal concentration of 15 mg/L of formalin.

#### CONTRAINDICATIONS

Aquarium Solutions® Ich-X® SW is similar to other formulations of formalin in that accidental or purposeful overdoses can kill aquarium fishes and other aquarium residents. Do not use on fishes which have had a history of problems with formaldehyde-containing treatments. Do not use in aquariums for which the exact volume of water being treated is not known. Unless recommended by another authoritative source, do not use Aquarium Solutions® Ich-X® SW at greater than the minimum, standard dosage. Do not use treatments more often than once every eight (8) hours, and do not use where significant, pretreatment water changes are not possible. Pre-treatments water changes will help insure that the aquarium water is not heavily contaminated with dissolved or suspended, organic or inorganic matter that can seriously impair fishes' respiration. Heavy organic load can seriously impair the effectiveness of the treatment.

Do not use with any other disease treatment including copper-containing treatments. Copper-containing treatments, in particular, seriously impairs marine fishes' immune responses.

Generally, fishes under stressful conditions can tolerate as much Aquarium Solutions® Ich-X® SW as they can in the absence of stress. However, heavily diseased fishes must be treated with caution, and if signs of stress increase (e.g. "piping" or gulping at the water's surface, heavy coughing, head or body jerking, or sudden, unprovoked darting about) an immediate water change (at least 50%) must be made. Removing the fishes to untreated water will, of course, help mitigate adverse reactions.

Aquarium Solutions® Ich-X® SW may be used in aquarium systems containing invertebrates such as shrimp, crayfish or snails, however, observe the reactions of these organisms carefully and remove them from the treated water if they show adverse reactions. While Aquarium Solutions® Ich-X® SW has been tested on a wide variety of invertebrates it must be noted that treating diseased fishes must always be preformed in a separate quarantine/treatment (Q/T) tank. In

many instances where a treatable disease has occurred in an aquarium with mixed animals types (e.g. a marine "reef" tank) and where removal of the diseased fishes is not possible it will often be best to revert to a method of control utilizing frequent and large water treatments and cleaning and replacement of filter media (where applicable). This control method will require patience and a suitable supply of prepared, properly conditioned, saltwater.

Aquarium Solutions® Ich-X® SW is not for human or veterinary medical use. It is not for use on food or game fishes. It is not for use in open water ways, rivers, streams, canals, irrigation ditches, lakes, recreational ponds, nor in aquarium or pond systems which empty directly into any such waters. To repeat, do not use Aquarium Solutions® Ich-X® SW with any other drugs or treatments (including any other "saltwater ich" treatments).

Remove carbon filtration, if used, and shut off foam fractionators ("protein skimmers"). Do not shut off water pumping, but cleaning mechanical filter media, prior to starting treatment, is recommended. Once the treatment is concluded replace the carbon with new material.

#### **STABILITY**

Aquarium Solutions® Ich-X® SW is stable for an indefinite period if kept in its original container and stored away from heat and cold. When not in use store tightly closed, at room temperature (above 60°F and below 100°F), and out of direct sunlight. Do not return unused portions to the original container.

CAUTIONARY STATEMENTS WARNING: Undiluted Aquarium Solutions® Ich-X® SW is poisonous to humans and pets. Aquarium Solutions® Ich-X® SW may be fatal if swallowed. Do not get in eyes (may cause blindness) or on skin. Wash thoroughly with soap and warm water after handling. Keep away from food and feed. ANTIDOTE: If swallowed call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger, or if available, by administering syrup of ipecac. Do not induce vomiting or give anything by mouth to an unconscious person. In case of contact immediately flush skin or eyes with plenty of water for at least 15 minutes. For eyes, get medical attention.

CALIFORNIA WARNING: Aquarium Solutions® Ich-X® SW may contain ingredients known to the State of California to be potential or actual carcinogens (cancer causing) or teratogens (birth defects causing).

#### STANDARD TREATMENT PROCEDURES

The standard use-dilution of Aquarium Solutions® Ich-X® SW is 5 mL (1 teaspoon) per 10 gallons of aquarium water. Prior to starting treatment with Aquarium Solutions® Ich-X® SW perform a large, initial water change (at least 1/3 of the aquarium's present volume using Aquarium Solutions® Ultimate or a combination of Aquarium Solutions® Stress-X® and ClorAm-X®). Do not condition new water with any sulfinate-, or sulfoxylate-containing water conditioner (i.e.: Prime®, De-Chlor and AquaPlus) as these products will interfere with the proper functioning of the treatment and will likely reduce dissolved oxygen in the treated water. A nearly complete water change, prior to the use of Aquarium Solutions® Ich-X® SW, will often prove to be highly beneficial to the ultimate success of the treatment.

Repeat treatments, as necessary, with pre-treatment water changes of 10% to 25% depending upon the period between treatments. The closer together the treatments the smaller the water change can be. Repeat at least every 24 hours until a cure is affected. Re-treatment as often as every 8 hours is possible if the fishes can be closely observed and progress of the disease careful observed. For such frequent re-treatments, the diseased fishes can be more easily be observed in a proper Q/T tank.

Observation of the cycle of the appearance and disappearance of the white spots should dictate the course of the treatment. At those times when the spots are gone, or reduced in number, the Aquarium Solutions® Ich-X® SW should be re-dosed following a water change. Treatment should continue for no less than three (3) days after there are no visible signs of ich.

#### **PACKAGING**

Aquarium Solutions® Ich-X® SW is packaged in convenient 4 fl.oz., 16 fl.oz., and 1 gallon sizes. Containers are fitted with child-resistant (CR) closures (caps)..

#### **CONTACTING US**

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